THE CULTIVATOR.

THIRD — To Improve the Soil and the Mind. — SERIES.

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Gold, and Farmers' Prices.

A LATE English paper very aptly remarks, "Our world of credit, like the world of the Hindoo philosophy, rests upon an elephant, which is supported by a tortoise. The elephant is our bank-note circulation; the tortoise, a few millions of gold in the coffers of the bank of England."

The wealth of the world consists not in the amount of gold and silver it possesses, nor in the amount of bank-note circulation on the basis of these metals. Real wealth is a full supply of the comforts and necessaries of life, in the form of good homes, good farms, convenient public and private conveyances for people and produce, the supply of all articles for the gratification of personal wants, and for the promotion of intellectual culture.

Small circular discs of certain metals called money, could supply none of these wants, if there were not a general understanding and agreement among men, that they shall be the representatives of wealth. A precisely similar, but more limited agreement, makes bank-notes the representative of these discs, and consequently of wealth itself. A third representative is "credit," strictly called so, which is still more limited in the extent of its action. A man furnishes commodities to his neighbor, and charges him on book account. This book account is the representative of wealth, for it will bring the money or other goods in due time. Or he furnishes goods for bank notes, which are alike its representative, for they too, according to agreement, will bring it. Or, he sells for gold coin, because it represents wealth by a more universal agreement, and will everywhere command its possession.

The amount of gold and silver is much greater at present than two centuries ago, and the prices of commodities, represented by these metals, are much higher. But prices would not probably be any higher than formerly, if gold and silver were the only medium for trade. The commercial business of the world has increased enormously during this period, and by far the greatest portion is carried on through the medium of credit, either by book account, checks, promissory notes, or bills of exchange. However excellent the "cash system" may be in many instances, the great convenience of credit will doubtless keep up its use as long as men do business with each other. It would be impossible to estimate the amount of business thus transacted at the present time. It is said that during the greatest activity in the grain trade in England, some years since, there were persons employing a capital of only five thousand pounds, who carried on business by means of book transactions to an amount of five or six hundred thousand. The bills of exchange, alone, in circulation in Great Britain, have been supposed from calculation to amount to a hundred million pounds; at the same time that the bank-note circulation has been less than forty millions. The transactions of the London Clearing House are said to be about three million pounds daily, liquidated by means of a little more than two hundred thousand in bank notes. We state these facts to show how small a share money has directly in the accumulation and transfer of the wealth of the globe.

What effect, then, it may be asked, will the present accumulation of gold have upon the prices of land and its products? This is a very important question to such as may be about to purchase farms with a long period for payment, or to those who may sell under like circumstances. If a man sells a farm at fifty dollars an acre, and before he gets his pay. it has risen to a hundred dollars an acre, and all the necessaries of life have risen in like proportion, he will feel rather dissatisfied with his bargain. A glance at the past may throw some light upon the subject of a rise or fall in prices.

During the sixteenth century, when the amount of business transacted was small, a prodigious increase of prices took place by the long continued influx of silver, consequent on the discovery of the western world. This increase has been estimated as high as 300 per cent. The value of gold became nearly doubled, or one pound of gold which before was worth only nine or ten pounds of silver, afterwards exchanged for fifteen pounds of silver. At the present time, the reverse is taking place, though in a far less degree, yet sufficient to drive the present silver coin out of general use. During the seventeenth and eighteenth centuries, the increase of the precious metals produced, in the space of about fifty years, an advance of 20 or 30 per cent. in prices.

Whether a correspending increase in prices will take place in the next fifty years, is somewhat involved in conjecture. An exchange of commodities may be carried on to an unlimited extent without money, or with only enough for the payment of the balance. The rapidly increasing facilities for conducting business on credit, through the assistance of telegraphs. railroads, and steamships, will of itself tend more to increase the prices of property, than all the gold that shall be collected for long years to come. Its accumulation will be far less felt in consequence of these facilities, and of its disproportion to the enormous increase in commerce; but it will not be without its favorable influence, for it will "serve to strengthen the golden tortoise, and render the superincumbent mass of credit more secure." And whether gold digging continues or not, the prices will probably advance gradually for the reasons already stated. On the other hand, the great improvements which are making to cheapen the cultivation of land, and in manufacturing, will tend to keep down the prices of its raw and of its manufactured products, and increase the value of land at the same time. All these conflicting causes, operating together, must prevent any sudden change in either direction.

Very mistaken notions prevail as to the effects of Californian and Australian mining. Many suppose that if the country is flooded with gold, we shall have a "golden age" in earnest, with pockets at all times full of money, and life's comforts and luxuries in profuse abundance. Nothing can be more fallacious. For, admitting that by a sudden influx, gold should become as plentiful as silver formerly was, and that as a necessary consequence prices should suddenly rise, as we shall suppose, to as high an increase as those of the sixteenth century, or 300 per cent., what would be the result? What glorious times, some will imagine, these would be for the farmers,—wheat at three dollars per bushel, corn at two dollars, beef and pork at twenty-five cents, butter at fifty, and other surplus farm produce in like proportion. Merchants would be delighted to find their goods tripled in value; mechanics would rejoice at their tripled wages. and lawyers and physicians at their three-fold fees. But this outburst of joy would all subside as soon as the farmers began to purchase their dry goods and groceries, and the shop-keepers their farm provisions. The mechanics and professional men would find it no more easy to live than before, for their greatly increased means would require an equally increased outlay to supply every want. They would now learn, what many have never learned, the difference between value and price. The *real* wealth of the world, would remain the same; all the difference would be in the increased amount of its representative, gold, required to purchase every article. Hence we arrive again at the truth stated in an early part of these remarks, that the possession of the precious metals is not wealth in itself, but it consists in all those means and materials which go directly to supply our wants. Real prosperity depends not on money, but on the industry, enterprize, intelligence and energy of the people, in procuring the comforts of home, in multiplying the products of the soil, in perfecting all the arts of cultivation, in facilitating the manufacture of all crude materials, in rendering markets and exchanges accessible, and above all, in a general wish to consult the *general good* in preference to selfish interest, which is a most healthy, life-giving principle for any community.

Steam Plows.

A writer in the *Farmers' Magagine* (London) gives it as his decided opinion that steam plows can never come into general use. He witnessed the experiment made on Locharmoss, near Dumfries, and states that in consequence of the want of uniformity in the soil, the work was done very imperfectly, and the iron belt which drew the plow, continued repeatedly to break, as it met with obstructions. If the engine is a fixed one, placed in the center of the field, it must be heavy and expensive, to resist the lateral pressure; if it is so constructed as to travel in company with the plow, which could only be done on dry and hard ground, a force equal to that of two or three horses would be constantly expended in draging the engine itself. If this difficulty exists in England, in the way of introducing steam power for plowing, it must be still greater here, where coal or other fuel is costly, and horse labor comparatively cheap. Hence the reason that the use of the *fixed* steam engine, for threshing, grinding, &c., is so common in England; while here, horse power for thresing is universal. If, therefore, we find it most costly to employ steam for *fixed* farm work, it must become far more so to use it in such a way as to require a constant removal of the engine.

The writer above quoted thinks that steam plows can only come into use on level tracts of moss or peat bog, where the surface is even, and the texture uniform and with no obstructions.

High Culture and Great Crops.

American readers of agricultural journals are familiar with the name of J. J. MECHI, the energetic and celebrated English farmer, who has rendered himself eminent by his success at "high-farming," that is, by profuse manuring, and profuse crops. He has, in short, applied garden culture to his whole farm. He has made a late report of his success with mangel wurzel, the soil for which was made one foot deep, and two hundred weight of super-phosphate of lime applied per acre. This is none else, as our readers may know, than bones dissolved by sulphuric acid, and this amount alone is abou tequal to a good dressing of

yard manure per acre, for some purposes. Liquid manure was copiously applied to the growing crop. The result was—one *good* square rod contained 89 roots, (or about one to three square feet,) average weight 8lbs. 2 oz. each, or 52 tons per acre. One poor rod—8 roots, averaging 5½ lbs. each, or 36 tons per acre. Average of the ten acre field, 43 tons per acre. Many roots weighed 23 to 25 lbs. each, without tops, and measured 33 to 42 inches in circumference. He asserts that this high culture will enable him to produce roots at five shillings, ($1.25) per ton. The liquid manure penetrates the soil and acts immediately. One load of cow dung, rendered liquid, will by its immediate action, manure more land than four loads dry. He thinks after a lapse of some years, sewers from towns and public institutions will rent at a high price, and the farmer "no longer fret and stew about Lobos Island, Peruvian monopoly, or peculative deception," but use the fertilizing materials which are now wasted, and swept into rivers and the ocean.

Great Secrets in Cultivation.

Those of our readers, whose recollections extend back far enough, may remember to have heard of a great discovery that was once made in the cultivation of the earth, and for the public announcement of which, a few hundred thousands were asked from one of our state governments. The state government declined paying the price, but the people individually paid subsequently large sums in the aggregate, to obtain separately the secret. Many of them have thought that the dollar thus paid by each was well expended. Without giving any opinion as to the merits of this discovery, we shall undertake, for the benefit of our readers, to mention several other secrets in the art of cultivation, doubtless quite as new and original, and which we are confident, if properly known, appreciated, and acted upon, would be worth to the mass of American farmers, quite as much as the sum claimed for the other.

1. The first, and perhaps the most important of these secrets is, *doing everything in its season*—and never putting off till to morrow what can be done to-day. We have known farmers, occupying not over a hundred acres, who lost by sowing crops too late, by failing to seize the most favorable opportunities for planting and for harvesting, by allowing grain to get over ripe, by neglecting to provide and repair tools, and to examine the condition of fences at the more leisure periods, and in various other ways, to lose annually at least one hundred dollars on an average. Consequently, an effectual remedy for this evil would be worth in the aggregate, to a half a million of our farmers, no less than *fifty million* dollars annually. What government will give us half this amount for divulging the secret? How many individual farmers will give us a dollar for this knowledge?

2. Another great secret is the proper *saving of manures*. Half our farmers at least, waste more than half the value of the manures deposited by their domestic animals, through the escape of all the liquid portions, worth one-half of the whole; and by the dissipation and loss of a large share of the solid portions. These losses might be saved by the construction of tanks or basins for liquids, and by the free use of straw, dried muck, sawdust, fence-corner turf and soil, &c., for absorbing and retaining the portions of manure commonly wasted. Now, manure is the main-spring of good farming; and wasting one-half or two-thirds of all that might be saved, is lessening the crops and starving the land, to an amount equal to a hundred dollars yearly for medium farmers. This, for the half million, would again be fifty million dollars.

3. The knowledge of the great advantages resulting from under-draining, remains a secret to many. We have known a field of land so wet as scarcely ever to pay in crops the cost of cultivation, but which, after thorough draining, yielded the first year forty bushels of wheat per acre. Those who have practiced tile-draining extensively have often found the whole expense reimbursed at the close of the second year by the increase in product. There are few farms that would not be benefited more than a hundred dollars above all expenses by thorough draining, making the aggregate gain for the whole country fully equal to that of the preceding instances.

We need not multiply examples of this kind, to show the proneness of men to leave what is easily learned, and which may prove eminently advantageous, for that which is "far-fetched and dear-bought," to show that we need not "compass sea and land" for the discovery of new and wonderful arts, of little value, while so many advantages lie unimproved directly beneath our feet.

Cultivation of Oats.

One of the best articles on the cultivation of oats which has appeared, is the Essay of J. Rowlandson, as published in the last number of the (British) Farmer's Magazine. As the same rules of cultivation will apply in a great measure to both countries, we shall perhaps render an acceptable service to our readers by giving a brief outline of the facts stated in that article, so far as they may be of general application.

Soil.—Any soil in good condition will produce good crops of oats—they can be profitably grown on soils too poor for other cereals, rye excepted—and on all intermediate stages of fertility up to rich virgin land. Some rich, newly drained peat soils have produced from 80 to 100 bushels of light grain per acre. With regard to climate, oats will flourish under a very wide range. The heaviest and best crops are grown on soils the most productive of ordinary farm crops. For all seasons, friable loam situated on broken limestone, has been found best. Heavier or more cloddy soils are apt to suffer from drouth, to remedy which sow early and rather thick. If sown late and thin, a miserable crop will be the result. On marly soil, the grain is heaviest, being often 45 or 46 lbs. per bushel—heavier crops, however, are obtained on rather looser or more friable soils. The heaviest crops on rich and moist drained peat, are raised during dry seasons, when the crop is sown early. On gravelly soils, unless in very good tilth, oats suffer most from drouth.

Cultivation.—The best preparation for luxuriant crops is freshly broken up grass land. The only objection is the small pecuniary return for so valuable a preparation. In the warmer parts of

England, fine crops are obtained by a high state of tilth and early sowing—these requisites doubtless being still more important in the warmer climate of the United States. Drilling has proved quite successful, in the few instances where this mode of sowing has been adopted, resulting in ten to twenty per cent saving in seed, and in additional product. Few crops derive more advantage from rolling. Early sown crops are invariably the best. If sown late, the chances are ten to one against a productive one, as the young plants are checked by dry weather, from which they rarely recover. The best time for cutting, is when a few of the grains retain the slightest possible trace of green color on the chaff. Very early oats may be cut somewhat greener, as they will ripen afterwards in the midst of hot weather—a reason why they may be cut greener in this country of hot sun, than in the cooler climate of England. Oats are more liable to heat in the stack than either wheat or barley, on account of their more compact layers, and hence should be left in the shock till well dried. In dry soils and climates, autumn sowing is recommended as decidedly best.

The results of many experiments are given to show the comparative value of different varieties, but that are here omitted as being not generally applicable to this country.

Polishing Plows.

There is hardly a farmer to be found, who has not at some time had his patience tried, with having to stop every few rods, back his team, and scrape off the dirt from the mould-board of his new plow; and this for two or three days upon a stretch, before the coating of sand and iron had been worn through, and the proper iron mould-board made its appearance, smooth and bright, ready for use and wear.

Now, to all those who are expecting to go through with the old operation of polishing a new plow, by scraping it the coming spring, I would propose the following cheap and effectual remedy:

Go to any druggist shop and procure 4 oz. of sulphuric acid, or oil of vitriol; which will cost from five to ten cents, according to the conscience of the druggist. Take a stick and wind upon the end a woolen rag, and tie it on with a coarse strong twine, making a swab; set your plow where it will be exposed to the sun, if convenient; then pour the sulphuric acid into an earthen bowl, and dilute it with an equal quantity of rain or river water. Take the swab and thoroughly moisten every part of the plow that requires polishing; work fast, lest the acid eat up your swab before you have gone over the surface, and be careful not to get any on your clothes or skin, for it is very corrosive. Let the plow stand about 24 hours, then scrape off the scales which will have arisen all over the surface wet with the acid; hitch on the team and go ahead; and in from fifteen minutes to one hour, the plow will be smooth and bright.

The rationale is this. The outer coating of the castings is composed of a mixture of sand and iron, more or less porous, thus admitting the free passage of the acid, which decomposes the iron, changing it to an oxide, and as soon as the solid iron is reached, the action of the acid terminates, or is very slight, owing to a want of surface upon which to act.

Farmers, try it; and when you are made acquainted with some simple, cheap contrivance, for promoting the comfort, and lessening the expense of others as well as yourself, make it known by writing a few lines to the editor of some good agricultural periodical like the "Country Gentlman" and "Cultivator," and thus let your light shine before men. E. D. PEIRSON. *Hudson, Mich.*

Manure Cellars.

A great mistake is often committed in the management of manure cellars. The manure is permitted to accumulate unmixed, except with such small portions of straw, plaster, &c., as may be used in sprinkling the stable floors, but which prove wholly insufficient to prevent the rising of the steam and odors, "like a gross fog Bœotian" through every crack and crevice into the apartments above. Very perfect and tight floors will indeed exclude them, but will not preserve the valuable portions of the manure, like mixing the whole mass into an inodorous compost. Plaster or gypsum, with water, contributes to retain the ammonia, and is useful on the land to a certain extent; and pulverized charcoal is excellent for the same purpose. But for the common purposes of farmers, for using on a large scale, nothing is equal to dried mould, turf, and swamp muck or peat. Enough of these materials should be carted into the manure cellar, or under some contiguous shelter, to form a mass at least equal to the whole of the manure from the stables. If well dried by remaining there a long time, they will not only act chemically in retaining the ammonia of the dung, but they will also act to a very great extent mechanically, in absorbing all the liquid portions. They should be applied in thin successive layers as the manure is gradually deposited. Many farmers have a large portion of their fences fixed, so as not to be moved, the borders of which, after a time, by escaping cultivation, become rich with vegetable matter. No better use can be made of the turf in these fence borders than mixing into compost. Where peat exists within convenient distance, it may be drawn to great advantage during the winter season.

The Mineral Theory.

The experiments of LAWES, in England, as our readers may well know, have contributed very largely to overset the former theories, that the application of the richest mineral constituents of manures is all that is necessary for increasing fertility and raising the largest crops. It is true, that when important mineral ingredients are absent from soils, it becomes a matter of great consequence to supply them. But experiments indicate that this is not a common deficiency; and that the application of the compounds of ammonia are of far greater importance. A late number of the Gardeners' and Farmers' Journal (English) contains the report of an experiment, which, in the opinion of that journal, furnishes a complete refu-

tation of the mineral theory; but it should be remembered that the results might have been very different on other soils. The following is in substance the experiment:—

An incendiary reduced to ashes a pile of barley-stacks, from some 12 to 15 acres of barley. The ashes were scattered over about half an acre of ground, adjoining the stacks,—thus concentrating the mineral constituents to about one twenty-fifth of the land from which they were taken. A turnep crop, a barley crop, and a crop of seeds, taken subsequently from this half acre, showed no perceptible superiorty over the rest of the field—neither portions of the land yeilding more than ordinary products.

Bees.

In a former article, (April, 1852,) I gave some few hints on the attention due to bees when swarming. If those suggestions are carefully observed, the inexperienced operator, though at first distrustful alike of his skill and safety, amid such myriads of volatile and irritable subjects, will by degrees acquire confidence by success, and come at length to esteem this exercise a most agreeable pastime. Arrayed in the simple defences of veil and mittens, one will soon learn to face the foe without the slightest apprehension of personal danger, and will regard the needful attentions bestowed on his industrious charge, as the most agreeable of all rural exercises.

It may be well here to say, that one must not look for entire uniformity in the movements of swarms. They vary materially in temperament, in apparent organization, in time and place of alighting, in disposition to enter the new hive, &c. The operator is simply to wait their time to alight, after which he must not rest until they are secured. The whole art of hiving seems to consist in bringing the bees gently to the mouth of the hive, and then with something soft, like a table-brush or the feather end of a quill, keeping them in motion until they have passed up into the hive; when the bottom board should be closed, and the hive carried and hung in its place. Every movement requires moderation. Any rude thumps or sudden jostlings awaken instant alarm and irritability, resulting not unfrequently in the sudden departure of the whole valuable swarm to the distant forest. The domestication and consequent usefulness of the honey bee consists, not in any direct exercise of control, for their light wings bid defiance to all human restraints, but in a process of encouragement, (by the kindest treatment,) of their instinctive propensity *to hoard;* so as to secure above the supply of their own wants, a portion of their delicious store for the remuneration of the owner's care. In this view no robbery is involved in the act of appropriating the surplus product. The claim is good for rent of tenement and actual service, while the tenant swarms suffer nothing in amount of supplies.

But the domesticated tenants of the hive and their faithful keeper, are not the only lovers of the delicious hoard. Many a greedy stomach, without certificate of title, is attracted to the apiary, bent on plunder, utterly regardless of the rights of property, watching assiduously for an unguarded entrance, or a contiguous nook in which to riot without molestation. Legions of busy ants will enter through a pin-hole, and the moth-miller, at a single sweep through the ranks of an unprotected comb, will deposit eggs enough to desolate the hive in a month. Once fairly in possession, this terrible foe intrenches himself in his silken shroud, and cannot be dislodged till the last morsel of sweet is consumed. From his own kind too, the honey-bee often experiences sudden and overpowering onsets. A hive that at sunrise is full of treasure and brave defenders, may ere the close of day be rifled of both, and the defrauded keeper can discover no trace of goods or robbers.

Inaccessible walls, a competent garrison and a well guarded entrance, constitute the main defenses of a castle against lawless marauders of whatever name. The depository of honey, likewise, so terribly beleaguered, *must have close joints, ample forces, and as contracted an entrance as will comport with the performance of necessary labor.* The moth has never effected a lodgment in any of my hives, and I think no swarm has ever suffered a penny's worth from this greatest pest of the apiary. This fact, is doubtless attributable to attention in some degree to the above precaution.

Late in autumn, I remove my hives to a dark cellar, which is tolerably dry, with cemented bottom, where they hang on the same frames till the snow is off in April. If the chambers are open to allow a current of air to pass through the comb, it is less liable to mould. Should the lower edges of the comb become moulded, after removing them from the cellar, blow a little tobacco smoke into the hive, and the bees will become so stifled that one may safely lay the hive on the ground and trim off the injured portions, without detriment to that which remains.

A variety of useful suggestions might be added, but they will readily occur to the practical operator, and experience is a good teacher. H. W. Bulkley. *Ballston, Feb.* 3, 1853.

How I Bought a Horse that had the Heaves,

AND HOW I TREATED THAT DISEASE.

BY HENRY F. FRENCH, EXETER, N. H.

Mr. Editor—Did you ever read "The Adventures of a Gentleman in Search of a Horse?" I read it, years ago, and have never been so fortunate as to see it since. If I recollect aright, it gives the experience of a man, who set out to purchase a perfect horse, and with about the same success that King Solomon had in trying to find a perfect woman; and tells how he, like all the rest of us, got cheated again and again, in different ways, as the *best of people will,* and indeed are more likely to be than anybody else. Once he bought a fine animal that was advertised, as "*sold for no fault, only the owner wants to leave town.*" and the new proprietor was led to feel the full force of the language, the first time *he* wanted to leave town, for his new steed could not be induced, by any suasion, moral or physical, to budge a single rod from his stable door.

Perhaps it was not *that* gentleman, but another, who having purchased a nag, which was represented as *free from all faults,* and found him stone *blind,* brought him back to the seller, and reminded him of his statement.

"I hope," replied the seller, coolly, "you don't call blindness a *fault*, when it is only the poor horse's *misfortune!*"

Everybody knows that I have no great pretensions to much knowledge about horses, and in order, therefore, to give my teachings due weight, you must be informed how I came by my education in this department of science. Be it known, then, that about five years ago, I chanced to be the proprietor of a mare, the verriest vixen that ever went on four feet. Among her other "amiable weaknesses," was a strange propensity to *kick*. It was her favorite amusement to kick at any other creature, quadruped or biped, that came within reach; and when tied alone, she would keep herself in practice, by kicking up her heels, as high as the scaffold, about once in five minutes, accompanying the performance with a squeal, that could be heard by all the neighbors.

Such an animal was rather difficult to dispose of, as you may suppose. Mr. Pickwick and his friend, after they had led that "dreadful horse" six miles in the heat and dust of a summer's day, without being able to mount him, were in a scarcely worse dilemma. Finally, my precious Kate, who was more of a "shrew" than even Petruchio's, having withstood most manfully (*womanfully*, occurred to me, but I won't say it,) all my endeavors to "tame" her, commenced a new species of gymnastics, by kicking up in the carriage every time she felt the breeching, in going down hill.

Now, as she would not work on the farm "for any man's persuasion," and was not precisely the kind of animal to sell to one's particular friend, as "a steady family horse," and as I did not dare to risk my own wife and children behind her, I began to read the "Muck Manual," with the idea of computing her agricultural value, for the compost heap, when fortunately I had occasion to drive her to the good old town of Derry, in a sleigh. As I came up to Cameron's Hotel, at about "a three-minute lick," as the jockies say, I saw at the sign post, a fine stately horse harnessed to a sleigh. I was examining him pretty carefully, when a man whose appearance announced him as one of "the Fancy" stepped out, and accosted me with, "Well, friend, do you want to buy such a horse as that?" "I should like him," was my reply, if he is as good as he looks, and you will sell him at a fair price, and take mine without any extra charge."

"Why, what sort of a beast have you got? She looks well, and came up the street as if she had legs enough."

I hope I shall be forgiven, if I suspected he would not believe more than half I said, when I replied, giving him the literal truth: "She is six years old, and sound, can trot a mile in three minutes, and will be likely to kick your brains out if you take her, in the course of a week." He assured me that *his* horse was perfectly sound and kind; that his price was three hundred dollars, and that he would "swap right;" adding, coolly, "I should like to see one horse that is uglier than *I* am."

I proposed to drive his horse, alone, to which the owner at once assented, and I steered straight off to the stable of a man, famous for his skill in horse-flesh, whom I had known when I was a boy there at Pinkerton Academy, and asked him to examine the animal with me. We drove him out of sight, and gave him a thorough investigation. We tried him in all his paces, walk, trot and canter, forward and backward, examined his teeth, his feet, his knees, his eyes. We observed his breathing, spoke of the glanders, the heaves, broken wind, and various other ills which horse-flesh is heir to. But he seemed "all right." He was young, and large, and handsome, and fleet, and to all appearance sound and manageable; and yet we were perfectly satisfied that the horse had some defect.

However, I put a bold face on the matter, drove back to the hotel, and told my man I would give him fifty dollars to boot, or go along with my own horse. Without driving my mare an inch, he quietly unhitched his own horse from his sleigh, exchanged harness, put him to my sleigh, and pocketed his fifty dollars, hardly losing a whiff of the cigar he was smoking. I confess I was a little startled at his perfect composure, but with a friendly caution to beware of Kate's heels, I bade him farewell.

I had but five miles to drive that afternoon, to my native town of Chester, where I stabled my new horse for the night. I gave him the name of the "General," it being a time of political excitement, when both candidates bore that title. I never mingle politics with agriculture, and did not want my horse to run a political course.

Having dreamed of horses all night, besides having the *nightmare* once or twice, I awoke betimes, anxious to learn the condition of my new treasure. Everybody knows how much more pride one feels in his horse, than in any other property, and especially how it "takes the conceit out of him" to be cheated in a "horse trade."

I went to the stable with fear and trembling, doubting whether the *General* had not been transformed like "fairy gold," to dust and ashes, during the night, or whether he might not have been a witch's horse, and be found turned into a broomstick!

But he was there in full shape and proportions. *He gave a slight cough* as I opened the door, a sound which a man who has owned a horse with the heaves never will forget! and on examination I found he had a strange way of breathing, *his flank heaving two or three times* at every expiration of the breath. I was told at once that my horse had the *heaves*.

I had heard of the disease frequently, and had the impression, which I find is quite common, that it renders the animal worthless. However, as it was a complaint which struck at my purse and my feelings, and not like Katy's heels, at my *head*, I concluded to be resigned, and avail myself of my very manifest advantages for observations on its symptoms and treatment.

My horse went home to Exeter, sixteen miles, in fine style, with no symptom of disease, except once in a mile or two, a slight cough. Straightway I strove to learn all that books and stable men can tell of the heaves, and to try all known remedies.

In its common form, it is thought to be a formation of air cells on the *outside* of the lungs, from which the air escapes with difficulty. Sometimes, on dissection, the proper air cells of the lungs are found to be ruptured, and generally there is inflammation of the throat and windpipe. The theories about it are various. It is said often that the lungs have not room for action, and that food should therefore be given in a condensed form, and in moderate quantity—and this I should regard as correct, were it not notorious that horses at grass,

where they eat enormously, and keep their stomachs distended, are usually relieved of their worst symptoms.

I tried all sorts of *heave powders* on my patient, with no effect whatever. It is said that in a *limestone* country this disease is unknown, and lime water was prescribed, with no apparent advantage. Some one told me to give the horse *ginger*, and strange to tell, I found that a table spoonful of ginger given to the General with his oats, when breathing his worst, would cure him *for the day* in half an hour after he had eaten it; but on giving it daily, the effect soon ceased. It is a jockey's remedy, and will last long enough to *swap* upon. Finally, I was advised to cut my horse's fodder, and give it always wet. I pursued that course carefully, keeping the General tied with so short a halter that he could not eat his bedding, giving him chopped hay and meal three times a day, and never more than a bucket of water at a time.

He improved rapidly. I have kept him five years, making him a *factotum*—carriage horse, saddle horse, plow and cart horse—and he bids fair to remain useful for five years to come. Kept in this way, his disease does not lessen his value for speed or labor, a single dollar. When the boys grow careless, and give him dry hay, he informs me of it in a few days, by the peculiar cough I have mentioned; but sometimes, for six months together, no indication of disease is visible, and he would pass for a sound horse with the most knowing in such matters. There is no doubt that *clover hay*, probably because of its *dust*, often induces the heaves. Stable keepers, with us, refuse it altogether for this reason

Many suppose that the *wind* of the horse is affected by the heaves, so that fast driving at any time will, as we express it, put him out of breath. With my horse, it is not so, nor with others affected with this disorder.

When the General was at the worst, rapid driving, when just from the stable, would increase his difficulty, but a mile or two of moderate exercise would dissipate the symptoms entirely. We have, occasionally, what are called *wind-broken* horses, which are nearly worthless, for want of *wind*. They can never be driven rapidly without great distress, and frequently give out entirely by a few miles driving. This is thought to be a different disease. The General's case is, I suppose, a fair example of the *heaves*.

I have no doubt that *regular feeding with chopped and wet fodder*, and exclusion of dust from hay fed to other animals in the same stable, would render many horses now deemed almost worthless, and which manifestly endure great suffering, equally valuable for most purposes, with those that are sound.

And now, my dear sir, if you will call on me when the snow has gone, and the birds begin to sing, I will show you the General, fat and sleek. I shall be glad, also, to show to the *country gentlemen* of our neighborhood, one whom they already know by his works, as a man who has done much to make the earth fruitful and beautiful, and to enhance the enjoyments of Rural Life. *Exeter, N. H., Feb.* 7, 1853.

Pay all due attention to manual labor, none need be ashamed of the marks of honest toil; but a man need not insist on rubbing the dirt into his very soul, and being all his life a day laborer

Rambles in New-Hampshire and Vermont.

I propose to give your readers some notes of farms and farming, in different sections of New-Hampshire and Vermont. My first letter will embrace the extreme northern valley of the Connecticut River, from its source, away up among the highlands of New-Hampshire, down sixty or seventy miles below.

In no part of New-England is there a better or more desirable soil, than that composing the whole valley of the Connecticut, extending a distance of three hundred miles, to the sea-board. The meadows upon either side, are annually overflown, and on many farms such rich deposits are made as supersede the necessity of cultivation, or applying manures, for many successive years. Two tons per acre of the best quality of hay, and fifty bushels of oats, are produced upon these farms, with but very small cost for fertilizing products.

In the northern valley, the waters in high freshest run so rapidly, that the quantity of sediment deposited is comparatively small, and consequently the benefits of irrigation are limited. The land has to be turned up and well manured, to produce good crops of hay or grain. When well treated, it returns an ample and remunerative harvest. Back from the river, the hills afford the sweetest pasturage, to their very summits, excepting those which have been long cleared. The farmers in this section have preferred to intrude upon their heavy forests for fresh pastures, rather than attempt the renovation of their old and worn out ones. The first clearing costs about $10 per acre, One crop of wheat is taken, averaging 20 bushels per acre, worth from $1.00 to $1.50 per bushel. When oats are sown, 50 bushel is the average crop. If the land is intended for pasture, six or eight pounds of clover, with one peck of herdsgrass, are sown with the wheat or oats.

When grass seed is required for a crop, three or four quarts, without clover, are used. The first yield of seed upon hard-wood land, is usually eight to nine bushels per acre. The next from five to eight. Three successive crops of grass seed, taken from the richest upland soil, renders it unfit for good pasture. It is a great exhauster. Mr. Rufus Cross, of Colebrook, N. H., raised in 1851, 300 bushels. Many others in the same town 100. It sold for $3.00 per bushel.

The farmers, generally, in this part of Connecticut River valley, do not yet fully appreciate the benefits of thorough culture and liberal manuring. They do not yet know the capacity of their farms. By attempting without any system, to cultivate too many acres with a given quantity of manure, their work is done superficially. They are emphatically behind the times in the work of improvement. Not so with all, however. There are many wide awake with a noble enthusiasm.

The following "Rough Notes from my Memorandum Book," will give an idea of what some of the best farmers are doing in the section of which I am writing.

Mr. Nathaniel Beach, of Canaan, (Vt.) has a farm of some 200 acres, 70 of which are Connecticut intervale—yielding on portions of it, three tons of hay per acre. He applies his manure in a rotted state, either on sward or old ground, at the rate of 20 cart loads to the acre; spreads and plows in. This is done both in fall and spring, as

suits his convenience. On sward land he will sow oats, four bushels per acre—crop, 50 to 70 bushels. Next year he manures in the hole, and plants corn, the eight rowed Canada variety. The average yield is from 50 to 60 bushels per acre. He sows buckwheat on land prepared as for oats, and gets 40 bushels per acre. After corn he again sows oats, and seeds down with clover and herdsgrass. Mr. B. is beginning to raise Swedish turneps to fatten his hogs. He boils them with buckwheat meal. He makes his hogs earn their living by supplying them with muck and scrapings from his cattle yards. He throws in large quantities of buckwheat hulls, which absorb all the liquids, and make a most excellent manure. He has a fine dairy of 20 native cows, improved by judicious care in selecting the best, and keeping well. His dairy products amount to 4,500 pounds cheese, and about 1,000 pounds butter, annually. Mr. B. has never kept an accurate account of the cost of his farming, but promised to do so the coming year.

HON. JOHN DEWEY, of Maidston, (Vt.) tried an experiment with pure clay, as top-dressing on a dry sandy knoll. He drew on at the rate of 20 loads to the acre—placing a shovel full in one spot and letting it dry, and then knocking it into very fine parts, giving a good coating, equally distributed. This was done in the spring. The grass came on luxuriantly during the summer, and where he before obtained half a ton of hay, he got one and a half tons. Since, a good crop has been annually produced. W. A. W. *Lancaster, N. H., Dec.*, 1852.

Premiums Awarded at the Winter Exhibition

OF THE NEW-YORK STATE AG. SOCIETY.

I. DAIRY BUILDINGS.—Horace Clap, Houseville, Lewis co, silver cup, $50.

II DRAINING.—Joseph L. Swan, Fayette, Seneca co., $20.

III. FIELD CROPS.—*Winter Wheat*—Ira Apthorp, Riga, Monroe co., 53 bush. 9 lbs. per acre, $20.

Spring Wheat—Chas. W. Eells, Westmoreland, Oneida, 30 bush. 31 lbs. per acre, $20.

Oats—1st. E. M. Bradley, East Bloomfield, Ontario, 93½ bush. per acre, $15. 2d. Calvin Pomeroy, same place, 87 2-100 bush. per acre, $10. 3d. Benj. Enos, DeRuyter, Madison. 75 bush. 9 lbs. per acre, $6.

Barley—1st. A. Gurnee, Watertown, Jefferson, 282 bush. on 4 27.100 acres, $15. 2d. David Hess, Fenner, Madison, 128 bush. 46 lbs. on 2 15-100 acres, $10. 3d. R. S. Ransom, Perryville, Madison, 104¼ bush. on 2 19-100 acres, $6. 4th. Benj. Enos, DeRuyter, 108 bush. 30 lbs. on 4 4-100 acres, Trans.

Buckwheat—1st. William P. Coonradt, Brunswick, Rensselaer, $10. 2d. David Coonradt, $8.

Beans—Jeremiah Parker, Watertown, 41 bush. on 1 1-10 of an acre, $10

Potatoes—1st. Peter Crispell, Jr. Hurley, Ulster, 554 bush. on 1 17-100 acres. (Yam potatoes) $10. 2d. Jeremiah Parker, 410 bush. on 1 4-100 acres. $10.

Carrots—N. & E. S. Hayward, Brighton, Monroe, 600 bush. on 55-100 acres, $8.

Flax.—Benj. Aikin, Pittstown, Rensselaer, 23½ bush. seed and 445 lbs. flax, on 1 16-100 acres, $10.

Clover Seed—F. N. Tobey. East Bloomfield, 30 bush. 22 lbs. on 6 acres 100 rods. $5.

IV. GRAINS AND SEEDS.—*Winter Wheat*—Aaron Houghtaling, New-Scotland, Albany, Soule's wheat, very fine, weighing 62 lbs. per bush., $8.

Spring Wheat—1st. David Coonradt, $8. 2d. George K. Eells Clinton, Oneida, $5. 3d. R. S. Ransom, $3.

Rye—1st. David Coonradt, $5. 2d. W. P Coonradt, $3.

Barley, four-rowed.—1st Obadiah Howland, Owasco, Cayuga, 52 lbs. per bush., $5. 2d. Samuel Morgan, Albany, 41½ lbs., $3.

Barley, two-rowed.—1. David Hess, "Hess Barley," 53 lbs. per bush., $5. 2d. R. S. Ransom, "Hess Barley," 51 lbs. per bush., $3. 3d. Obadiah Howland, 49 lbs. per bush. $2.

Oats.—1st. Peter Crispell, Jr., 42 lbs. per bush., $5. 2d. David Coonradt, 39 lbs., $3. 3d. C. W. Eells, 39 lbs., $2.

Indian Corn.—1st. C. W. Eells, $5. 2d. Samuel Morgan, $3. 3d. O. Howland, $2.

Beans.—1st. R. S. Ransom, Canada field, $5. 2d. O. Howland, large white, $3. 3d. David Coonradt, round white, $2.

Paris Barber exhibited 31 varieties of beans, which attracted much attention.

Peas.—O. Howland, $5.

Timothy Seed.—1st. O. Howland, $5. 2d. C. W. Eells, $3.

V. DAIRIES.—*Butter*—1st. Joshua Ballard, Homer, Cortland, silver cup, value $15. 2d. H. Worden, Jr., Lee, Oneida, do. $10. 3d. Noah Hitchcock Jr., Homer, Cortland, do. $5 4th, Ira Bowen, Homer, Cortland, Trans.

Cheese.—1st. Moses Eames, Rutland, Jefferson, cup, value $15. 2d. Paris Barber, Homer, Cortland, do. $10.

VI. FAT STOCK.—For 1st and 2d best fat oxen, 4 years old, to Gilbert & Sprague, $30 and $25. 3d. Ira Rix, $20. To Robert Rome, Genesee, for 1st and 2d best, 3 years old, $25 and $20.

Fat Cows—1st. Augustus Ross, Preston, Chenango. $20. 2d. Wm. Felt, Smyrna, Chenango, $15. 3d. S. Gowdy, Lewis co., $10.

Fat Heifers—Erastus Corning, Jr., Albany, $15; and $15 to B. McNeil, Carlisle, Schoharie, for 3 years old.

Fat Sheep—Hungerford & Brodie, Jefferson co., for best over 2 years old, $10. 2d. E. Gazby, Dutchess co., $8.—3d. Leonard Jennison, New Lebanon, $5.

D. S. Baker, East Bloomfield, for the best long wooled, under 2 years, $8. Also for the best middle wooled, over and under 2 years, $10 and $8. Also for best cross-bred, over and under 2 years, $10 and $8. B. McKeely, 2d best cross-bred, $8, and J. Winnie, for 3d best, $5.

VII. DRESSED MEATS.—D. S. Baker, for best long and middle wooled sheep, $5 and $5. Patrick Downey, Albany, for 2d best do. $3 and $3. For cross-bred, 1st, Kenelly & Magraw, Albany, $5. 2. Patrick Downey, $2.

Swine—over 350 lbs. 1st. E. Corning, Jr., Albany, $5. 2d C. Rapp, Albany, $3. Under 350 lbs. Jurien Winne, Bethlehem, 1st and 2d, $5 and $3.

Poultry—Turkeys, 1st and 2d, O. Howland, $2 and $1. For Capons, 1st. O. Howland $2. 2d. E. S. Bliss, $1. For Geese—1st. E. S. Bliss, $2. 2d. O Howland, $1. Chickens—1st. E. S. Bliss, $2. 2d. O. Howland, $1. Ducks—1st and 2d to E. S. Bliss, $2 and $1.

VIII. FRUITS.—Ellwanger & Barry, Rochester, were awarded a silver medal for their fine show of winter pears Copies of different works on fruits were awarded to Ellwanger & Barry, J. H. Wells, and A. Frost & Co., Rochester; T. G. Yeomans, Walworth, John S. Goold, Albany, P. Barber and Chas. Kingsbury, Homer, N. & E. S Hayward, Brighton, J. J. Thomas, Macedon, Wilson, Thorburn & Teller, Albany, Isaac Merritt, Penfield, F. W. Lay and Robt. Brown, Greece, and Hart Massey, Watertown.

IX. LIVE POULTRY.—No premiums were offered for live poultry, and consequently none awarded; but among the entries, the following were worthy of notice:

Black Javas, E. K. Johnson, Albany.

Bolton Greys, Dorkings, Jersey Blues, B. P. Johnson, Albany.

Java Fowls, Cochin China hens, Master Egbert Carey, Albany.

Gray Shanghies, Black do., Buff do., Cochin China, Golden Poland, Silver do., Black fantail Pigeons, Black Cayuga Ducks, Bremen Geese, Fancy long eared Rabbits, a very fine collection. E. E. Platt, Albany

Black Spanish, Cochin China, Buff Shanghaes, Buff do, Spotted do., Malays, Javas, Black Poland, White and Java Bantams, White Shanghaes, Golden Hamburgh, do. Polands, Grey Chittagong, Game Malays, Imported Shanghaes, very fine collection. W. H. Southwick, New-Baltimore.

White Cochin Chinas, White Shanghaes, Grey do., Black do., Yellow do., White fantail Pigeons, fine collection, John E. Tompkins, Greenbush.

Black Shanghaes, White do., Partridge do., Black Spanish, fine collection J. M. Lovett, Albany.

Dorkings, Dominique, Cross Birds, L. G. Morris, Fordham.

White Shanghaes, Black Spanish, J. McD. McIntyre, Albany.

White Shanghaes, Black do., Brown do., George Anderson, Albany.

Colored Shanghaes, Grey Chittagong, White do., red wing do., C. Bonticue, Lansingburgh.

Pheasant Fowls, Golden Hamburgh, white crested Fowls, Turkeys, E. Corning, Jr., Albany.

Cochin China, four, something new, Thomas W. Ludlow, Yonkers.

English Game Fowl, E. Goodrich, Albany.

E. E. Platt, Albany, exhibited a superior pair of fancy lop. eared English Rabbits.

Culture of Hops—No. 3.

Drying.—All hops should be dried as soon after they are picked as possible. At least once a day all should be gathered, and immediately put to drying. If they are kept over night, unless the weather is very cool, they will be likely to heat, or at least their color may be slightly changed, which will injuriously affect their appearance, and not by any means can they be restored.

Kilns for drying are variously constructed The one I shall describe is the same I have used, and similar in most respects to nine-tenths in use in this vicinity. Being found to answer well all purposes, and, upon the whole, about as convenient as any other form. The size should of course be somewhat proportioned to the size of the yard, and the number of hands intended to be employed in picking. It may be in the form of a parallelogram, and about as much space will be required in the upper story for storing, as for drying. The lower story is used for a kiln and a press-room. The posts ought to be high, as in no case should the carpet on which the hops are spread be less than ten feet from the ground floor below.

I know many are used that are not more than six or seven feet high; but this is entirely wrong, and now fast giving place to higher ones. If the kiln is high, the heat has a much better chance to expand and become more uniform. There is much less danger of scorching the hops, and finally I believe it could be easily demonstrated that less heat would be required. Stone or brick buildings would be altogether preferable to wooden ones, being closer, and consequently wasting less heat, and being more fire-proof, there would be less danger from fire.

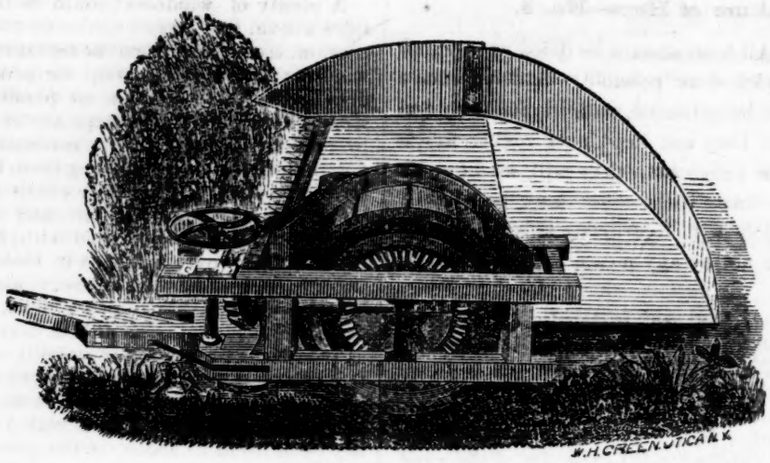
Where wood buildings are used, the inside of the kiln is lathed and plastered all around, leaving only a small door to enter. The sills should be laid one to two feet above ground, and well underpinned with stone laid in mortar, leaving two holes at least, on each side and end, say 6 by 15 inches to supply air from without, to send the heated air upward and through the hops. And this supply of air can be regulated at pleasure by opening or closing the holes.

The hops are spread on a carpet above, supported by small sticks one and a fourth by one and a half inches in size, and nailed to the joists so as to leave about as much space as they occupy. The carpet may be of linen or cotton, (hair carpets, I believe, are used in England, but I have not known them used in this country,) hard twisted, and wove thin, or half slaied, as the weavers have it. The carpet should be well stretched and firmly nailed to the rack above described. The depth to which the hops may be spread will vary with circumstances, from six to ten inches, and I would much prefer the former to the latter, although I have seen them well dried when even more then ten inches deep.

The kiln above, should be sufficiently high to clear a man's head when standing erect in any part of it, and if the sides are plastered to the plates all the better, as in times of high wind it will prevent it from driving the warm air from one side to the other, and thereby cause them to dry uneven.

A plenty of windows should be inserted in the sides above, and large cupolas on the top for ventilation, &c. The hops being spread, and the windows above all closed, we proceed to build fires below, and as soon as possible to get up steam, especially if the hops are at all discolored by rust or otherwise, as it is necessary to get them a little moist in order to bring them to a more uniform appearance by burning a little sulphur under them. If the hops are bright and of good color, the sulphur can be dispensed with, though I think it rather improves all hops in looks, and causes them to open and dry more easily, and for this opinion I have the authority of a great many good hop dryers. A high degree of heat is as soon obtained as possible, and continued steadily until the steam from the hops has nearly all passed off. As there is no danger of scorching at this stage of the drying, (especially if the kiln is high,) the heat must not be allowed to abate, or the steam then passing off would fall back on the hops and stain and discolor them, causing them to become second or third in quality. As soon as the hops are well warmed through and feel moist, the sulphur is burned. Previous to this the windows above must be kept closed in order to keep the heat and steam in, to get the moisture on the hops. After the sulphur gets well to burning and the fumes fill the kiln above, the windows are opened, and a strong draft of air let in under the sills to force the hot air through the hops, and drive both sulphur and steam out of the building. A lively air or heat, passing rapidly off, and being constantly supplied with new or fresh heat, and not a dead, inactive one, is what is needed I will here remark that if high winds prevail, the windows on the side to the wind ought not to be open, as drafts of cold air on the hops would not be of much service. But as every one in drying hops will need to exercise a good deal of judgment in this as in all other respects, I will dismiss this part of the subject by simply saying there should always be a liberal supply of air below, and free and sufficient ventilation above.

As before remarked, a steady heat must be maintained until the moisture is all off, and the hops will rattle a little at the bottom, the top also beginning to feel a little dry, when they ought to be turned, and the heat may be slackened a little. I know many do not turn their hops, or suffer them to be at all disturbed during the process of drying. But from repeated trials in both ways, I am decidedly of opinion that both time and fuel are saved by turning; and there is no waste or injury to the hop if they are turned at the right time. As this is a point on which there is a considerable diversity of opinion, I will give only one (though there are many) strong reasons for turning hops while drying. It is hardly possible, in spreading a flooring of hops, to get them perfectly even and uniform in thickness. They may be level, but there will be places where they will lay more light and loose than others. This is almost unavoidable, as every one knows who has ever dried a kiln of hops; and of course the heated air will pass more readily through those places than where they lay more compact, and such places will become dry while the more solid parts will feel moist and require much more time to dry. Now, when this is the case, as it most invariably will be, the current of heat rushes to those places where it can most easily ascend; the hops all the



BURRALL'S REAPER.

while growing more and more open, admit it to pass more readily; the heat rushes through them as through a funnel, and of consequence diverting, as it were, the heat from these parts which need it most. Turning obviates this difficulty. They all become mixed, and all dry alike at the same time. They may be turned in different ways; but I think plowing through them with the feet about as good as any. Then level with a rake.

Drying is decidedly the most critical and important operation that we have to perform with hops. It is very important that they be cured well, and just enough and not too much. No rules can be laid down, the strict observance of which would enable any one, without the exercise of good judgment, to dry hops well. There are, perhaps, as many tests as men, by which persons determine when their hops are sufficiently dried. A very simple one, and perhaps as often used as any, is to examine the stems, and when about one-third of them are dry and brittle, the others being more or less wilted, they may be considered about done.

Hops ought not to be removed from the carpet until they are cool. But if necessary to take them off warm, to make room for others, they must be carefully handled or they will break and shell and waste.

As to the time required for drying a kiln of hops, it will depend on circumstances. They may be cured in ten to fourteen hours, though a little more time would be desirable.

Formerly all hops were cured by burning charcoal under them. This was found to answer very well, though of late a better way is found in the use of stoves, with wood for fuel. This is beyond doubt the least expensive, and altogether the best way now in use, and is fast being substituted in place of coal. Two stoves, if rightly put up, are sufficient for any kiln. AN OTSEGO HOP-GROWER.

Burrall's Reaper.

One of the best reapers at the Geneva trial of implements, as our readers of last year are aware, was the one presented by Thomas D. Burrall, which for its simplicity of construction and the perfection of its work, became one of the very few general favorites, among the crowd of intelligent farmers who constituted the spectators of that very interesting exhibition.

We furnish our readers with the above representation of this reaper, showing distinctly the circular platform which receives the cut and falling grain, immediately behind the serrated and vibrating teeth, and giving a general view of the wheelwork, in the compact and simple form which this machine is known to possess.

Effective Action of Manures.

Nothing has had a more retarding influence on the success of chemical agriculture, than the error which has been so frequently committed, of calculating and pronouncing with precision, in advance, the result of the application of mere theoretical estimates. Farmers have been told that analysis would show the exact composition of their soils, and its wants; that if any ingredient should be deficient, the chemist could point out with the accuracy of mathematics, the substance and the quantity that would restore its fertility, without resorting to the random and empirical course of applying a whole set of fertilizers in the shape of common manure. Experiments of this sort have been abundantly tried; a few have succeeded, and these have been widely published; most of them have failed, and the failures have slowly found their way among the intelligent portion of the farming community.

We admit that at first view, the chemical theory appears exceedingly plausible, and promises the most satisfactory results. But there are a number of circumstances which were inadvertently overlooked, and which, had they been taken into account and properly appreciated, would have furnished the strongest grounds for doubting this beautiful theory.

Far more important than the mere presence of fertilizing ingredients, or even the *chemical condition* of those ingredients in many cases, is their mechanical texture and degree of pulverization. We have elsewhere given an instance, furnished by one of the most eminent scientific and practical cultivators of our country, where the complete crushing of the clods of an adhesive soil, and grinding together with them into powder the ma-

nure applied to the land, produced an affect upon the subsequent crop *five times* as great as the ordinary operation of manure. How absurd it must be to make strict calculations on the result of a given quantity of yard manure, without ever inquiring into the mode of application—whether on the one hand by spreading in large unbroken lumps, carelessly and imperfectly plowed under, and in a condition wholly useless for plants, or even detrimental in case of drouth—or on the other by a thorough harrowing of the soil and manure together, before turning under, and a repetition of the operation when necessary afterwards for complete intermixture. We have known the most admirable results by this practice, where nothing but fresh coarse manure could be obtained for succulent garden crops, and nearly a total failure under like circumstance without its performance. Even the time of year that manure has been carted on the land, has sometimes had an injurious bearing on the success of its application, simply by the packing and hardening resulting from traveling over its surface when in a wet and adhesive condition. It is a perfectly self-evident truth, that a mixture of unburnt bricks and clods of manure, would afford immeasurably less sustenance to the fine and delicate fibres of growing plants, than the same mixture ground down together into a fine powder.* Hence it may be reasonably believed that the general introduction and free use of pulverizers, as the most effective harrows, clod-crushers and subsoilers, assisted by tile-draining, may be of greater benefit to the whole country than the importation of a million tons of guano.

The chief reason of the extraordinary results of liquid manuring, is the complete manner in which the enriching particles are diffused while in solution through every part of the soil. We here allude to the later mode, which consists in mixing the solid parts of manure thoroughly and freely through large volumes of water, and not to the old mode of applying the liquid portions merely of fresh manure, which impoverishes the land of phosphates and lessens the organic matter, and hence has been mostly discontintued. The only doubt of the propriety of the more improved mode of applying liquid manure, is on the score of cost in cartage; it is unquestionably much better than the common mode of manuring, but is probably less economical than solid application in connection with finely pulverizing by repeated harrowing.

In addition to the state in which manure exists in the soil, there is another consideration of much importance in relation to its best and most economical use. Succulent crops, as turneps and cabbages, are rapid growers and require rapid feeding; hence, manure which has undergone a considerable degree of fermention, is found to effect this purpose to better advantage than fresh or entirely unfermented manure. Wheat crops on the contrary, are of more moderate growth, and less rank feeders, and consequently need a less profuse supply. To apply large quantities rich in ammonia to such crops as do not need it, would of course result in waste, and different applications to large feeders would give scanty products. The adaptation of the amount to the specific purpose intended should therefore not be overlooked in estimating the effective value of a a given quantity.

In making the preceding remarks, we wish to be distinctly understood as not wishing to set aside in practical farming, an investigation of the composition and knowledge of the deficient or missing ingredients of soils, as well as the restoration of these by special manures. But independently of several difficulties arising from the variable nature of the soil of the same field, and the very different results in growth which a slightly different chemical condition of those ingredients may give, showing that all the suggestions of science in chemical agriculture must be submitted to rigid experiment—independently of these considerations, all experiments based on the analysis of soils and the use of fertilizers whose constituents are determined, which do not take into full consideration their mechanical texture, can not fail to result in the utmost uncertainty. When, in addition to this, it is remembered that a large portion of the fertility of many of the best soils of the country, are in a great degree lost by their coarse and miserable mechanical condition, resulting from hasty and imperfect tillage and from the want of thorough under-draining, it must be admitted that while much of the attention of scientific farmers has been directed to chemical inquiry, too little, far too little, has been given to the thorough pulverization and intermixture of the rich ingredients which they already possess.

* A fine illustration of this truth was furnished long ago by the wonderful experiments of Jethro Tull and more lately by that of Smith of Lois-Weedon.

Benefits of Draining.

"*My land don't need draining!*" is frequently the stout assertion of the owner of light loamy soils, on the surface of which water does not stand a day, except in early spring. "How can I know whether draining will do my fields any good?" is the more doubtful inquiry of others who have sometimes seen its beneficial effects. We believe, as a general rule, every acre of ground should be thoroughly and evenly underdrained, wherever it becomes necessary to dig a drain to a cellar—but where the subsoil is so porous that a cellar is dry without an artificial outlet for the water, nothing more is needed for such land. Dig a pit anywhere, three feet deep, and if water remains in it during the usual period of plowing, planting, or cultivating, then, most plainly, that land needs the benefit of underground channeis. Some of our readers will recollect the statement of T. G. Yeomans, in the last volume of *N. Y. Agricultural Transactions*, who regularly drained an apparently high and dry field of light loamy soil, which his neighbors positively assured him, needed nothing of the kind; but whom he convinced by showing the large stream which afterwards rushed out of his main trunk. F. L. Olmsted, in his *Walks Talks in England*, mentions the case of a gentleman who drained thoroughly and expensively, a piece of high land. All thought him crazy—"the hills were too dry already,"—he was throwing away his money. But he patiently awaited the result, which was that the increased rental soon repaid the outlay, and his land was tripled in value.

Answers to Inquiries.

THE DAIRY.—What is the best kiud of *churn* for the use of a small dairy of some three cows?

What the best kind of *cheese press* for the same, where a family only wish to make enough for their own use? D. B.

The best churn, without any question, for a small dairy, is *Kendall s* cylindrical, costing $2 to $2.50, and to be had at the principal agricultural warehouses, at Albany, Rochester, &c. They are simple, last many years, and can be easily worked by a child.

We cannot speak so confidently about a cheese press, but our impression is, that for a small dairy, *Collins & Stone s* self acting press, smallest size, costing about $5, is the best.

TREATMENT OF SANDY SOILS—SENDING SEEDS BY MAIL.—A. C. CARNES, of Spencer, Tenn., inquires for the best treatise on the management of *sandy soils*. We strongly recommend him to procure the Transactions of the New York State Agricultural Society, Vol. XI., for 1851, where he will find an excellent practical essay of twenty pages on this subject, from the pen of WINSLOW C. WATSON, of Port Kent, Clinton county, N. Y.

With regard to subsoiling—all experiments properly performed, have resulted in greater or less benefit, with scarcely an exception. It would probably be of little advantage in a loose, sandy soil, unless the red clay beneath is reached, in which case an intermixture might be of great benefit. A limited experiment for trial would be perfectly safe.

Seeds of the coarser sort, as corn, beans, &c., may be sent by mail and by express. If in small quantities, the former is least expensive—if large, the latter. Our correspondent can judge by recollecting that an ounce of either may be sent by mail for the trifling sum of six cents—which is enough to begin an experiment.

CRANBERRIES ON UPLAND.—On looking over the Cultivator for the last year, I see inquiries concerning the low Cranberry. I believe they have never been cultivated much on upland, in this part of the country, as they are found growing wild in almost every neighborhood; but I have seen them growing thrifty, and bearing well, on land sufficiently dry for an orchard, among large thrifty apple trees, and dry enough for Indian corn—in fact, no spring was found near them; they rambled to that spot from a low place, where the water run a little while in the spring, when the snow was melting; the rest of the year it was dry enough for any crop. Last summer, in the driest part of the season, I took some from a swamp, and set them in a damp (not wet) place in my garden. They were growing when cold weather set in. I intend to set out more next spring. H. C. WHITTEMORE. *Sheldon, Vt.*

RED ANTS.—In one of the Cultivators of last year, an inquiry was made for an exterminator of *red ants*. Several years ago, my father rented a house, almost overrun with them, and they were destroyed in the following manner:—A piece of shag-bark (hickory bark) was laid upon the shelf in the pantry, where they seemed to be thickest, and it attracted them—indeed it seemed more of a favorite with them than anything they could get. The piece we had, about four inches wide and two feet long, was red with them in an hour or two, when with a sudden jar, they were shaken into the fire, and the bark set as a trap for them again. In our case this was an entire exterminator. C. B. BROWN. *Damascus, Pa., Jan.* 29, 1853.

FEEDING CUT HAY AND MEAL.—I notice in the Country Gentleman of the 17th inst., an inquiry from C. Ingalls, Esq., as to whether cut hay and meal will injure cattle when fed upon it. I have now cut all of my hay, stalks and straw, for my cattle, for six years, and have always fed my fattening stock with a *liberal* quantity of meal upon it, and have never had an animal injured in the way Mr. Ingalls mentions; but on the contrary, when hay *was not* fed with the meal, I have had cattle injured in the way named. To prevent such injuries, I cut hay. J. M. S. *Feb.*, 18, 1853.

STALL FEEDING CATTLE.—Mr. J. OTIS, in stall feeding cattle, I think will find it the best and most economical way in feeding, to grind his grain, even if he goes six miles to mill; mix equal quantities of corn and oats, grind fine, and feed to an ox of 1,600 lbs. live weight, half bushel per day, with cut hay, wet sufficiently to have the meal adhere to the hay when well mixed, given at two feeds, morning and night, with one bushel per day of turneps, carrots, or other kinds of roots. Three months feeding will make very fine beef. In moderate weather keep the cattle in the yard, with good sheds. Stable them when the weather is cold. Almost any kind of coarse fodder may be given once a day.

Other grain may be substituted for corn and oats, of sufficient quantity to give an equal amount of nutriment. Some feeders give to a pair of oxen 1 1-2 bushels of provender a day. My own opinion is that one bushel a day is as much as two oxen can well digest to make it profitable. A. B. *Brooklyn, Conn.*

CULTURE OF THE ONION.—I noticed in the last number of the 'Country Gentleman," inquiries for the cause of the growth of scullions. I will answer. There is no doubt, it is late sowing; long experience has convinced me that the seed or condition of the soil has no agency in the matter. Extreme and continued dry weather after sowing, retarding vegetation for weeks, will produce the same effect as late sowing. Onions should be sowed the first time the land is sufficiently dry in the spring. In the spring of 1840, I sowed two acres of onions; the land was raked, and the seed sown before the alleys were made around the piece, the alleys being made by a line. When the onions appeared, they did not extend on one side to the alley, varying from six to eighteen inches. To remedy the mistake, the rows were marked out to the alley, and the same kind of seed sown. The onions came up, and a vigorous growth to all appearance, soon made them equal to that portion first sown; and after the bottoms began to form, the tops of the last sown were larger, and gave fair promise for a much greater crop. The result was, the first sown were proper onions, with very few exceptions; the last were mostly scullions, possessing so much of the character, that breaking them down, and other experiments to force them to bottom, did not in the least change their relation to onions. W. RISLEY. *Fredonia, Feb.* 26, 1853.

ONE-HORSE REAPERS.—(H. *Felchville, Vt.*) We know of no one-horse reaping machine, nor do we think any would be likely to be useful except in rare instances, as such a one would require the same attendance as a two-horse reaper, and perform only half the work.

FANCY LOP-EARED RABBITS.—*J. G. H.* We know of none at present, for sale, in this vicinity. They can, we presume, be had of F. ROTCH, Esq., and R. H. VAN RENSSELAER, Esq., of Morris, Otsego co., N. Y. Price, $12 to $15 per pair.

BASKET WILLOW.—"A Constant Reader" is referred to the 5th Number of the Country Gentleman or to the Cultivator for March, for answers to his inquiries on this subject.

EMERY'S MOWER.—We state, in answer to several inquiries, that the price of this machine is to be $110—the Mower and Reaper combined, $120.

BULLOCK'S SEED PLANTER.—*J. M. K.* We know nothing personally of the operation of this planter in the field, but judging from its operation on our office floor, we should think it would prove useful.

AMERICAN HERD BOOK.—*J. M.* This work can be procured of C. M. Saxton, Bookseller, New-York.—Price $3.

Information Wanted.

CEMENT WATER PIPES.—I wish to inquire whether any of your numerous subscribers, have used water lime with gravel, to make pipes to force water through, with a hydraulic ram; and if so, how is it liked, and what the expense was per rod—also how prepared and how put down. I should like to know whether the machines are all alike, and if not which is the best; whether the glass or metal ball. S. S. MOREHOUSE. *Avon, March* 1, 1853.

A QUESTION FOR PRACTICAL FARMERS.—Why is it that when white and yellow corn are planted adjacently, the yellow will mix with the white, but the white not with the yellow? H. *Kelloggsville, N. N., March,* 1853.

LOSS FROM MOVING HAY.—A correspondent wishes to be informed as to the actual loss resulting from removing hay from one barn to another, by its being exposed to the air. For instance, "suppose I put fifty tons of hay into the large barn in the haying season, and when the foddering season comes, feed it out, taking care not to expose it to the air any more than is necessary. Now how many tons of hay must I draw from the out barn, to be equal in value to the fifty tons put into the large barn in haying time, the hay all being of the same quality?"

USE OF LIME.—Will some one of your subscribers, who has experimented in the use of lime, inform me what he considers the best mode of applying lime—the quantity per acre for corn, potatoes or broom-corn; also for a top dressing on mowing or pasture—whether he would use it with plaster, ashes, or any other substance? Is it necessary to analyze the soil, to determine whether it may be applied to advantage? Any information on this subject would be received as a favor. A SUBSCRIBER.

PORTABLE HAY PRESS.—Have you any better portable Hay-press in use in your section of the country, than "Bullock's Patent," and is this a *good press* and portable, without adding so much to the cost that it would be "paying too dear for the whistle?" Would it be better for me to buy the press that turns out 200 lb. bales, or the one that bales 300 lbs.? Will some one who has experience answer the above questions.—A. S. L. *Loudon, Tenn.*

BASKET WILLOW.—I wish to inquire about the cutting of the willow, and preparing them for market. How and at what time are they to be cut? While the bark will peel? And is the bark to be stripped off? In short, how are they to be cut and prepared for market, and what price will they bring? Inasmuch as the subject is before the public, please give all the information available, and you will oblige, perhaps, many subscribers, surely one. R. A. FINNEY. *Elizabethtown, Essex co., N. Y., Feb.* 5, 1853.

☞ If any of your correspondents can tell the *cause* or *cure* for the failure and death of young thrifty Maple trees, of six or seven years growth, (as I have observed several such cases without any apparent cause,) I should like to know through the Cultivator. H. G.

CULTURE OF THE HOP.—I have read the communications of An Otsego Hop Grower, and shall be greatly obliged, if he will inform me if at the time of grubbing in the spring, any soil ought to be removed from the top of the hill. Also whether the old root from which the vine sprung the previous year, should be permitted to remain, or should be cut off. L. T. S.

ONIONS ON MUCK-SOD.—An exchange paper informs us, that C. T. Tucker, of Decatur, had raised luxuriant crops of onions, (as well as corn and potatoes,) on the inverted sod of reclaimed marsh. Some were of great size, being as large as a tea-saucer, while those on highly enriched upland were not half the size.

Agricultural Societies.

NEW-YORK STATE.—Proceedings of the Executive Committee, March 3—Present, J. Delafield, E. P. Prentice, Geo. Vail, J. Beekman Findlay, Wm. Kelley, B. B. Kirtland, Charles Morrell, B. P. Johnson.

GRASSES.—The Secretary was directed to procure ten bushels of each variety of grass seeds, which were recommended by the committee at a former meeting for trial. It is so late in the season that the seeds will not be obtained in time for spring sowing, but they will be procured in time for another season; and gentlemen desirous of experimenting with these seeds are requested to forward their names to the Secretary at as early a day as practicable. The annexed is the resolution of the Society, and the varieties of grasses selected for trial:

Mr. KELLY, from the committee on the subject of procuring a variety of grass seeds for cultivation in this State, reported, recommending that "a system of trial and comparison of the grasses enumerated* be made by farmers, in various parts of the state, whose interest in the cause will induce them to undertake and carefully carry out the experiment, by sowing not less than one-eighth of an acre of each sort above named; and that the corresponding secretary be directed to procure, by importation or purchase, an ample supply of seeds, and furnish them in his discretion to such persons as shall agree to prosecute the experiments in conformity with directions to be given, and to report the result to the Society, in such form as may be prescribed."

The premium list was taken up and completed, and ordered published.

NEW-YORK STATE.—The Executive Committee of the New-York State Ag. Society have adopted the following regulations in regard to fine wooled sheep, (Saxon, Merino, and crosses between these breeds,) in the hope that greater justice will be done to exhibitors than heretofore—and the true merits of the sheep exhibited will be more satisfactorily ascertained.

Requirements.—The number of ewes to be exhibited for premium to be five, and they must each have suckled a lamb the present season.

1. The fleeces must be sent to the Secretary at the Agricultural Rooms, immediately after shearing, with the private mark of the owner, and a mark placed upon each sheep corresponding to that sent the Secretary—and a lock of wool left on each sheep. The Secretary to record these marks in a book to be provided for the purpose, and to be shown to no person until the fleeces are produced at the Fair.

2. A statement must also be sent containing the age of each sheep—how the sheep have been kept—the date when shorn, and that the fleece was but of one year's growth. The length of time after washing when the fleece was shorn—and that each sheep had suckled a lamb up to the time of shearing.

3. The Middlesex Mills standard for sorting the fleece to be adopted, and the Secretary is to send each fleece to the assorter, marked by him, to be weighed, examined, and noted, as to its various qualities.

4. The fleece to be carefully cleansed, dried and weighed, and each fleece to be put up separate and returned to the Secretary with the sorter's report.

5. The sheep to be exhibited at the Fair, and to be examined by the judges.

6. After the judges have examined the sheep, the fleeces are to be submitted to them, with the report of the sorter, and with the private marks of the Secretary—when the judges will make their awards.

Each exhibitor must present an affidavit to the Secretary, for the use of the judges, that the sheep exhibited are the same that the fleeces were taken from, which were sent to the Secretary for being assorted and examined, and that the statement furnished by him to the Secretary is in all respects correct.

Bucks.—The same rules as to shearing, marking, and statements as to age, feeding, &c., will be required to be verified in like manner.

The Dairy.

Caledonia County, Vermont.

The county of Caledonia contains an area of 700 square miles. In agricultural products it is one of the best in Vermont. The soil is naturally fertile, easy of cultivation, and under good management returns the most ample harvests. Her intelligent and enterprising farmers are not at all ignorant of their profession. Many of them know full well the capabilities of their farms, and are not slow in improving the knowledge they possess, and applying it to the very best advantage. The most important and profitable branch of husbandry carried on by the farmers of this county, is the dairy. It will compare favorably with the best counties in New-York. The Scotch farmers in the towns of Ryegate and Barnet, are renowned for their success in the manufacture of butter. For a number of years they have been awarded the highest premiums in Boston market, for the best article produced in New-England. I will notice a few dairies which I visited, and the method usually practiced in making and preserving their butter.

Mr. Hugh S. Gibson, of Ryegate, has a dairy of 20 cows. He sold the past year 3,000 pounds of butter, for 27 cents per pound. He reserved 200 pounds for family use, making 3,200 pounds, worth $864, or $43.20 per cow. He raised eleven calves entirely on skim milk, worth $6.00 a piece.

Mr. John Gibson, from three cows, made in 1852, 630 pounds, or 210 pounds per cow. Many other Scotch dairies produce from 150 to 200 pounds per cow. The Scotch dairy women are very particular and nice in their operations. They do not suffer the milk to sour before taking off the cream. It usually stands from 36 to 48 hours, according to the state of the weather. After this time, they say a sort of "*cheesy substance*" rises, which makes the butter stringy and tough. The cream is churned at a temperatue of 62°—the thermometer churn being used. The butter is considered best when the process of churning is continued one hour. When churned too rapidly, it is apt to be *salvey*. After the buttermilk is drawn off, it is thoroughly washed in cold water, (in summer ice water is used,) constantly drawing it off, till it becomes perfectly clear, and every particle of buttermilk is separated. It is then taken out and salted, with one ounce to a pound of butter; five or six tea-spoons full of loaf sugar are added to every 30 pounds. It is packed very solid, in 50 pound tubs, room being left on top in each tub, to spread fine salt, on thin cotton or linen cloth. Afterwards a pure brine is put on sufficient to cover the butter, and it is set away in a dry, cool cellar. The less the butter is handled, the nicer it will be.

The Scotch dairy cows are of the native breed, improved by selecting the very best, and keeping in high condition. In the spring, a few weeks before calving, they are liberally fed with turneps, carrots, and a little oat meal, and are not turned to grass till a full bite is afforded. The pastures all over Caledonia county are covered with a luxuriant growth of white clover. It grows spontaneously, and for grazing purposes its superiority is unequaled. It seems to be the object of the Scotch dairymen to gain the greatest possible profits from their cows; and this is accomplished by *keeping well*. "It is the first thing requisite," said an old Scotchman—"Keep *your cows well*, and they'll make amends for it."

The yankee farmers in the vicinity, are successfully competing with their scotch neighbors.—Wherever *profits* are concerned, they are sure to get a full share of them. The town of Hardwick annually produces between 80 and 100 tons of butter.

Mr. Jeremiah B. Philbrook, of that town, made from three cows, in 1851, 900 pounds., 800 of which sold for 18 cents per pound. He fed his cows upon oat-meal and potatoes—liberally of course; his object being to see what could be done by high feeding.

Bliss N. Davis, Esq., of Danville, whose farm is in Hardwick, sold from 13 cows 1800 pounds of butter—1600 for 25 cents, and 200 for 20 cents per pound. Besides this, he supplied a large family. His accomplished daughter deserves all praise, for the success which attended her efforts last summer, in this department, and her example is worthy of imitation by all the daughters of the land. Too many now-a-days consider it beneath their dignity, to take hold and manage the dairy. They aspire to higher honors. It is a sufficient recommendation for them to know how to sing and apply the piano admirably, talk French, and possess a taste for the fashionable literature of the day. But the idea of obtaining a practical knowledge of household business, of knowing how to make butter and cheese, is preposterous I am wandering from my subject; however, it is quite refreshing to find an occasional instance, where the daughter places a practical acquaintance with matters of the dairy, on the list of her accomplishments.

In my next, I will give you an account of the stock and crops of Caledonia county. W. A. W.

CHURNING IN WINTER.—Many a housewife has been disappointed and disheartened by an entire failure, after three or four hours churning in winter, and at a time when the scarcity of milk and the high price of butter, has rendered success particularly desirable. We believe this failure is in nearly every instance owing to the coldness of the room in which the milk is kept during the rising of the cream. Let the milk stand in a warm place, and the difficulty will be, in most cases, obviated. A still more effectual remedy is to scald the milk before placing it in vessels.

Accurate experiments were made some years since, by Prof. TRAILL, of Scotland, which throw some light on winter churning, of which the following is a condensed statement—three quarts of milk being used in each experiment, the cream rising for 39 hours:

Experiment 1. Cream sweet, with half a pint of cold water, churned 27 minutes, temperature rising from 62° to 70°, producing 1,386 grains of good butter. Ex. 2. Cream and milk together, sweet, churned three hours, cold water occasionally added, no butter. Ex. 3. Cream kept two days, half a pint of cold water, churned 20 minutes, temperature rising from 54° to 63°, and producing 1,756 grains of good butter. Ex. 4. Cream and milk, sour, kept two days, half a pint of cold water, churned 1 hour and 50 minutes, producing 1,968

grains of good but paler butter. Ex. 5. Cream and milk, after standing 39 hours as usual, heated to 156°, and skimmed next day, produced 1,968 grains of good yellow butter.

REMARKABLE PRODUCT OF BUTTER.—We have been furnished with a statement authenticated by oath, showing that from the milk of a heifer called "Cherry," calved June 14, 1849, owned by Miss MARY BRICE of New-Scotland, in this county, there was made in one hundred days, from Nov. 11th, 1852, *one hundred and three pounds of butter*, which was sold in this city for $25.75. The amount of skimmed and buttermilk was 1,432 quarts, worth at 2 cents per quart, $28.64. She dropped her second calf on the 4th of Nov., and it was raised on the skim milk, which had, to provide for the wants of the calf, to be skimmed before the cream had all risen. It was thought that had the milk been permitted to stand until the cream could all have been secured, the product of butter would have been increased at least 14 pounds, which would have increased the total income from this three-year old heifer, for 100 days, to $57.89. We are not informed as to the breed of cattle to which "Cherry" belongs, nor as to the amount of milk given. "Her feed," says our correspondent, "from Nov. 11, to Dec. 11, was nothing but the poor frozen pasture—from Dec. 11, to Jan. 1, owing to the very high price of hay, she was sparingly fed on poor hay, with about four quarts of buckwheat bran twice a day—from Jan. 1, to Jan. 25, she had good hay and same quantity of buckwheat bran—from the 25th to the close of the experiment, there was added to the above feed, about four quarts of cut potatoes twice a day." "It is," continues our correspondent, "the generally received opinion, that cows do not arrive at maturity for butter making, until six years old; and I think it reasonable to suppose that when Cherry arrives at that age, she will produce in the same time, double the amount of butter above testified to."

TURNEPS AND MILK.—It often happens that the number of remedies for any evil indicates their inefficiency, but the following, lately recommended, may be worth trying: 1. Remove the fibrous roots and every portion of leaf, from the turneps, which it is said, chiefly contribute to the taint of the milk. 2. Before going to milk, place a kettle of water upon the fire, and on returning, add to every gallon of new milk, half a pint of boiling water, (or a sixteenth.) stirring both a minute or two, before pouring out into the earthen or glass vessels.

We observe among the correspondence of some of the English agricultural papers, a statement that in Cornwall, where the cream is separated by fire, and churns are not used, the butter being "made with the hand in a few minutes," the taste of turneps is unknown; and also the following, to prevent this taste, which appears more likely to succeed than the other remedies. Feed the cows with sliced mangold wurtzel, with a small quantity of crushed oats added, together with plenty of sweet soft meadow hay, and use *no turneps* under any circumstances, and all complaints will cease.

A GOOD COW.—W. Ellsworth, of Mayfield, O., has a cow that gave 52½ lbs. of milk per day, during 21 successive days, and gave as high as 3 lbs. 4 oz. of butter per day, her feed being hay and 8 lbs. of bran per day.

FATTENING COWS ON APPLES.—A correspondent of the New-England Farmer fattened a cow on apples in 35 days, with the addition of seven baskets of what is termed cow-corn, in the year. She gained in one week 52 lbs. The beef was of the best quality.

Condensed Correspondence.

THE YAM POTATO.—I have grown this excellent potato for some years past, and have found it of most excellent eating quality, and superior to all other kinds I have ever tried, in resisting the rot. Being of hardier constitution and more solid texture, it retains its eating qualities later in the spring than the other varieties.—The character given to it for productiveness, by Mr. SMITH, who introduced it into New-York, and highly commended it to the attention of agriculturists, I am prepared to endorse. J. M. WARD. *Newark, N. J.*

POTATO BLIGHT.—Will you do me the favor to correct a mistake made in the extract from the paper I wrote you, on the cause of the rot. It is the water in the roots and bulbs or tubers, and not in the balls, as printed. It has been extensively the practice, to plant potatoes on wet ground, without draining. That is is one great cause of the disease,causing them to be less productive, and more liable to rot on any ground. The potato is not the only plant that is injured by flooding at the roots. The past season has proved my belief correct. There was no heavy rains in this region, from about April until late in Sept., but frequent refreshing showers. There was a very abundant crop of potatoes, and very sound ones, except a few in low grounds, that did not get ripe until a heavy rain came in the fall.—These rotted badly. PHINEAS PRATT. *Deep River, Feb.*, 1853.

SUGGESTIONS TO ADVERTISERS—PRICES.—I wish to suggest the propriety of always stating some price, to those who are in the habit of advertising property for sale. More than three-fourths of the money paid for advertising is a total loss to the advertiser, for this reason, besides failing in accomplishing the ends for which it is designed. It is annoying to take up a paper and read an advertisement of a beautiful farm somewhere for sale, without a price annexed. A would-be purchaser knows not whether it will come within his means or not, or whether it is worth as much money as he would like to invest in real estate. Nor can he know, without writing through the mail, and paying postage both ways, perhaps, and few will take the trouble to do that, and the affair is soon forgotten. The same rule holds good with implements and machinery.

I once knew three farms advertised in a monthly New-York paper, and the price carefully stated. Before another month came round, every one of them had been sold for cash at the advertised price. H. S. *Felchville, Vt.*

CHITTAGONGS.—Speaking of hens, I bought, on the 25th October last, a Chittagong hen with nine chickens, some six weeks old. She has since weaned the chickens, and laid one litter of 26 eggs, another of 14, and has just finished a third litter of 16, making 56 eggs since Nov. 9th. Whether that is worth telling of, I don't know. The hen is only a year old this month. C. S. HUBBARD. *Deep River, Feb.* 18, 1853.

ARTIFICIAL ICE—*To Mechanical Inventors.*—We want a cheap, portable machine to press pure snow from the drift into cakes of ice.

Ice would be much more extensively used, if it could be more conveniently procured. The great distance that many persons would have to go, to cut it on ponds or lakes, is very discouraging; and if your active heads and hands could provide us with such machine, it would soon be in great demand. Every independent householder ought to have an ice-house.

If the tenacity of snow prepared in this manner, should not be sufficient, it might be sprinkled with water on a cold night, when the mercury in Fahrenheit stands at zero.

With the advantages of pressing hay, cotton, and other loose substances, you must all be acquainted; and if clay without preparation, can be thrown into a brick machine, and come forth a perfect article, why may not snow undergo a similar process with equal advantage?

Horticultural Department.

Horticultural Notes.

THE CIRCLE OF PEARS.—Keeping apples the year round, so as to furnish a supply for every day of the year, is an old experiment, which all good cultivators have found no difficulty in performing. But with pears it is quite a different thing, and many, not understanding all the conditions for raising, gathering, keeping, and ripening the winter varieties, have come to the conclusion that winter pears are worthless. As a proof, however, of what may be accomplished, when skill and experience direct in their management, Col. WILDER, states that the *Easter Beurre, Doyenne d'hiver nouveau, Beurre Bretoneau.* and most of those with a thick, rough epidermis, are readily kept through the winter and spring, and into summer, and that some of this character he had preserved "in perfect condition the past season, and had them in eating, with the *Madeleine,* in August."

HANDSOME AND CROOKED TREES FROM NURSERYMEN.—A very sensible article on this subject appears in a late number of the Genesee Farmer, in which, after alluding to the great difference in the size and beauty of trees of different sorts, although of the same age, and similarly cultivated and treated, the editor points out the great disappointment which this difference sometimes causes to purchasers. The *Gravenstein, Baldwin, Northern Spy, Rambo. Late Strawberry,* and others, are rapid and straight growers, and any purchaser would be sure to be pleased with any trees he may get of these varieties, even with very little pains in selection. The same may be said of *Bartlett, Madeleine, Angouleme, Buffum,* and *Louise Bonne of Jersey* pears; *Black Tartarian, Napoleon Bigarreau,* and *Downer* cherries; *Washington* and *Imperial Gage* plums, &c. But if he orders *Early Joe, Melon,* or *Red Canada* apples, or *Marie Louise, Winter Nelis,* or *Seckel* pears; or *Plumstone Morello* or *Mayduke* cherries; even if whole rows are searched for the best, the nurseryman is sure to get plenty of abuse, for "such stunted, crooked, horrible trees." It is recommended that nurserymen designate the character of growth in their catalogues, that those who want *handsome* trees may know which to order; after which, *soundness, genuineness, good roots,* and *good packing,* be only required for the stunted and crooked growers.

TRANSPLANTING DWARF PEARS.—Cultivators are aware that the best trees are those which are worked as near the root as practicable; as deep planting should in all cases be avoided. Col. WILDER states that he has sometimes received dwarf pears from Europe grafted six or eight inches above the surface, in which cases he uniformly plants the whole of the root under ground, counteracting the deleterious effects of deep planting, by removing the long shank below with the lower and now inactive roots.

BLEEKER'S MEADOW PEAR.—This pear, which as grown in New York, we have usually regarded as about fourth-rate, is likely to prove of considerable value, in its place. Although commonly supposed to ripen about mid-autumn, it will keep into winter at the north, and good specimens have been kept even as late as mid-winter, some of which were exhibited by Ellwanger & Barry at the winter meeting of the N. Y. State Agricultural Society. The fine and remarkably vigorous growth of the tree and its great productiveness, and the fine quality of the fruit *for stewing,* are likely to render this a valuable culinary sort, especially as good cooking pears for winter use are quite valuable. In Pennsylvania, where this variety is considerably known as the *Feaster,* it succeeds much better than here, as a table fruit, and when well ripened, sometimes becomes of really fine quality.

Winter Pears in France.

We observe in the late report of the proceedings of the Horticultural Society of the Department of Lower Seine, the following names of the pears exhibited during the last winter and spring, which will show what sorts are there cultivated and kept during this usual season of dearth for fresh pears:

On the 6th of December, Le Cure, (Winkfield,) Franchipane.
" 7th of January, Easter Beurre, Fortunee, Doyenne d'Alencon, and very fine Passe Colmars.
" 4th of February, Sageret, Passe Colmar, Beurre d'Hiver Nouveau, and Easter Beurre.
" 27th of March, Passe Colmars.
" 5th of May, Duchesse de Berry d'Hiver.
" 15th of May, Bon Chretien de Naples, described as only for cooking, but valuable for its long keeping, handsome form, and brilliant coloring.

Grapes for Cold Houses.

J. FISK ALLEN, of Salem, Mass., widely known as a most skillful cultivator of the grape, succeeds admirably, by means of his forcing, cold, and retarding houses, in furnishing a supply of this delicious fruit during the entire yearly circle. Forcing grapes, so as to ripen them by the first days of summer; and raising them in cold houses for a supply throughout autumn, are well understood and commonly practiced. A retarding house, for winter ripening, and for keeping them hanging upon the vines in safety till wanted, is a greater rarity, and it may prove very desirable with those who shall attempt it, to know what sorts do best for this purpose. The late report of the fruit committee of the Massachusetts Horticultural Society, furnishes the following list for this purpose, from J. F. Allen, which he states is the result of ten years experiment:—

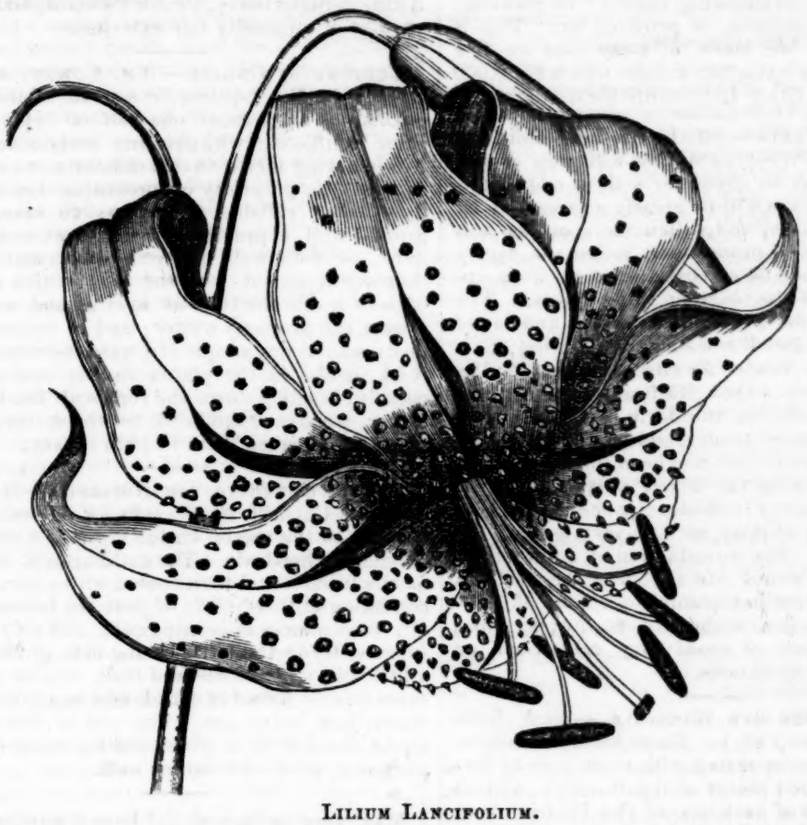
Those which continue fresh or without drying, in the retarding house, are Prince Albert, Queen of Nice, Syrian Porteau Noir, Black Portugal, Whortley Hall Seedling, Muscat of Alexandria.

Black Hamburgh, Wilmot's New Black Hamburgh, and Victoria Hamburgh, dry up some.

The following dry badly:—All the Fontignans, Black, White and Grizzly, and Zinfindal; Black St. Peter's is uncertain.

The Lily.

Long has the lily been dignified with the appellation of the "Patrician," among flowers. The emblem at once of Dignity and of Innocence, it has ever held a deservedly high place in the temple of Flora. Yet, until Dr Siebold, now nearly twenty years ago, introduced to us the majestic "Lilium lancifolium," from Japan, the extent of variety as well as beauty of the family was unknown. For none of the other species possess the extraordinary crystaline radiance of the pearl-like glands



LILIUM LANCIFOLIUM.

sprinkled over the petals of the L. lancifolium speciosum. Our illustration gives a good idea of the shape and form of the flower; but without colors, it is impossible to convey any adequate idea of the beauty of the roseate hue with which the flower is suffused.

The culture of this species of lily is very simple. The compost for them should be sandy loam and well rotted hot-bed manure, in equal parts, and a sixth part of white sand. They will be found to grow much stronger, and produce finer and more numerous flowers in such a compost, than in heath mold only, as it is the practice of many to grow them. This may be relied on from our own experience, extended over many years of their culture. They should be potted the beginning of January, for they commence their annual growth *at root* thus early, and if delayed, the rootlets from the bulb are liable to be injured. The bulbs should be shaken out from the old mold entirely, and placed two inches under the surface, in a pot of a size that leaves two inches between the bulb and the side of the pot, and then put in a greenhouse, or a cold frame. But no water should be given until it is observed to shoot up through the earth. Then water must be supplied gradually at first, but liberally as the growth progresses. In about six weeks from the appearance of the stem above the earth, it may be shifted with benefit into a pot two sizes larger than the former, taking care not to break the ball of earth, and to place it one inch *deeper* in this pot than it was in the last. The middle of May the pots may be placed out of doors, where they get the morning sun only, for two or three hours, and they will bloom the finer for it. But the sides of the pots should be protected by moss or some non-conductor of heat, from the action of the sun. After blooming, continue watering till the leaves begin to turn yellow, then discontinue it, and let the bulbs rest till the end of the year.

Answers to Inquiries.

COMSTOCK'S "TERRA CULTURE."—Do you know anything of Russell Comstock's *Terra* Culture?" Is it humbug? We are about trying to raise money to purchase his mode of Culture. Yours, GEO. TALBOT. *Centerville, Michigan.*

Having always regarded this scheme as a humbug, we never took the trouble to inquire into and pay for the secret. We observe, however, that the Rural New Yorker has "taken the responsibility" of divulging it; or, as the self-styled "Professor" terms it, of "disclosing the disclosures." The theory appears to be simply this—that the part in every plant just at the junction of the root and trunk or stalk, is the *seat of life;* hence setting a plant too deep, or too shallow, affects the seat of life, and the plant or tree dies or is injured. How many seats of life has a gooseberry bush or grape vine, which will afford by cuttings and layers, a thousand new plants? or how many has a potatoe or a paulownia, whose roots will afford as many? Is a man's nose the seat of life, because if covered he will be smothered and die?

To this theory, it appears he has attached many valuable and well known facts in cultivation—valuable, and well worth *the dollar* to those who

had never learned them before—the chief of which is comprised in "following nature" in planting, transplanting, omission of pruning, &c. This is the substance, we learn, of some four or five hours of tedious lecturing, and for which $500,000 were asked the State Legislature for divulging.

CEMETERY TREES.—(R. L. G., Edmeston, Otsego co.) The Weeping Willow will grow as well on dry upland as on any other soil, provided it is fertile. Its growth will be greatly accelerated by frequent irrigation, not with a mere surface watering. It will be more likely to escape injury from the severe cold of Otsego county, if on upland, and out of the reach of valley frosts. The American Cypress is not an evergreen, and is not particularly adapted to cemetery planting; it is probably rather tender for Otsego county. The European Cypress, although a beautiful evergreen, growing somewhat in the form of a Lombardy Poplar, is still more tender, and will not at all endure the winters of the northern states. A few of the best trees for the above purpose, are the Irish Yew, Balsam Fir, White Spruce, Silver Fir, Hemlock, Red Cedar, with a very few of the Mountain Ash. The introduction of a few of the finest climbers would much relieve the stiffness otherwise apparent in a plantation chiefly of evergreens. These can all be had at any principal nursery, at prices of about fifty cents each, or more for larger specimens.

PRAIRIE ROSES AND WISTARIA.—("A Subscriber," Grafton, Vt.) These highly ornamental runners are propagated with great ease by layers. Good rooted plants of the Wistaria, and of a large number of varieties of the Prairie rose, may be obtained of nearly all nurserymen. They all flourish best in a deep rich soil, which is indeed absolutely essential to the success of the Wistaria. All perfectly hardy.

FRUIT TREES ON STONY SOILS.—H. STEARNS, of Felchville, Vt., inquires if it "will pay to mow the weeds and grass in an orchard of young fruit trees, where it is too rocky to cultivate with the plow, and rake them around the trees for mulching, and forego the profits of pasturing the land."

The advantages of deep, rich, well-cultivated land, in promoting the rapid growth of fruit trees, and in increasing the extent of the crop, as well as the fairness and high quality of the fruit, are so extraordinary, that in all *practicable* instances the very best land should be selected for an orchard. But where circumstances entirely preclude this selection of land, and stony ground must be taken from necessity, the mode proposed by our correspondent may be regarded as next best. Deep and wide mulching, although by no means equal to good cultivation, is far superior o the more common practice of neglect; and it is altogether probable that when mulching is well attended to, young trees will do decidedly better on hard, stony land, than on the best soils, where they are permitted to become choked with weeds and grass. It must never be forgotten that the mulching is to be removed after the dry season passes, so as to prevent injury from mice.

In planting trees on such stony soils, those varieties should be selected which possess great vigor and hardiness of growth, and whose fruit is always fair, even under poor culture. Perhaps no sort is equal in this particular to the Rhode Island Greening. The Roxbury Russet, Baldwin, Autmun Strawberry, Peck's Pleasant, and others, are also of unusually fair exterior.

CULTURE OF ONIONS.—WM. COWEN, of West Exeter, N. Y., inquires for a mode of cultivating onions, as at present one-half of his crops become scullions, without any assignable cause. Never having met with this difficulty, we can only suggest the propriety of procuring the *best seed* from some reliable seedsman; to manure the ground well, if practicable, with fowl or hog manure, or with well decayed cattle manure, all thoroughly mixed with the soil, with a dressing of soot about the time of sowing, and soap-suds during the previous winter; and of trying the remedy sometimes adopted by gardeners to prevent thick necks in the plants during wet seasons, namely, bending down the tops with the hoe handle or wooden rake-head, to check their rapid growth and cause them to bulb sooner.

COTTON COVERING FOR HOT-BEDS.—M. WYNKOOP, of Catskill, N. Y., asks for information in relation to the use of cotton cloth as a substitute for glass in hot-beds. The cotton is first stretched on the frames, and then coated with a composition consisting of three pints of best old boiled linseed oil, four ounces of white resin, and an ounce of sugar of lead; the latter being first ground with a little oil, and the oil and resin heated to make them mix. A coat of this should be applied every season just before use. The cost of this mode is about one-fourth of glass, and for most common purposes, answers about as well.

MATURITY OF SCIONS.—I have a number of apple trees that I commenced grafting last spring, that I wish to finish the coming spring with the same kind, and as I cannot get scions in this vicinity, I should like to know whether scions cut from these trees will answer to set. L. N.

There is no objection whatever, to cutting scions from shoots made from last year's grafts, except that the growth being rather more vigorous and succulent, they will not be quite so likely to take. The more matured and hardened the wood, the better will be the success of the operation, and this is the sole advantage of matured wood.

HEDGES.—Will you give us, through the Cultivator, an article on the subject of Hedge Fence? the best plant adapted to that purpose, the proper mode of cultivation, the time required to make a fence, and the manner of propagating the plant. Also, what plant, if any, is adapted to marshy ground? H. H. TUTHILL. *Kelloggsville, Feb.*, 1853.

The two "plants" that have been the most extensively approved for hedges, are the Buckthorn and Osage Orange. The Buckthorn is the hardiest and therefore best adapted to the extreme northern portion of the Union; and it possesses the advantage of being as easily raised from seed as apple trees, and of being as easily transplanted as a current bush. It must be very bad treatment that would destroy one in a hundred by removal. The only objection to the Buckthorn is its want of thorns, the sharp ends of its shoots forming its only armor. The Osage Orange, on the other hand, is so numerously furnished with sharp thorns, that any ordinary animal would not

attempt to pass it, and the boy who should presume to do so would probably remember the encounter for years. But the plants are more difficult to raise or transplant, and they are too tender for the extreme north, but are quite hardy enough for the climate of Kelloggsville, or any other place where the peach tree is not killed by winter. Shearing and compact growing, makes it much hardier than under ordinary circumstances. The *American Arbor Vitæ* (or white cedar of Western New York, but not the true white cedar,) is an excellent hedge plant, as it forms, by shearing, a dense wall of verdure, both in winter and in summer, through which domestic animals are not tempted to pass. This and the Buckthorn would be best for marshy ground.

Before planting a hedge, the ground should be sub-soiled and trench plowed a foot and a half deep, and well enriched with manure, thoroughly incorporated with harrowing. We have known hedges to linger along for ten years, before reaching maturity, which would have been efficient in four years, by deep soil and good tillage. Select the plants in such a manner that those of nearly equal size may be together, and then the large will not overtop and check the small ones. The distance should be about six or eight inches in the row—the tops should be cut off to about three inches of the ground—the fine roots well spread out, and carefully filled in with fine earth—and the roots, before setting, kept constantly moist by a covering of earth.

The plants being cut off to within three inches of the earth, will sprout up thickly at the bottom of the hedge; the next spring the shoots are to be again cut off within six inches of the previous year's cut; the third year eight inches, the fourth year a foot, &c., which will give the whole hedge a thick matted texture, like wool in felt, so that if a portion of it is shaken by the hand, it will shake rods of it on either side. One great leading cause of failure in making hedges, is that the owners "can't bear" to cut down the fine thrifty shoots, according to these directions, and consequently they grow up long-legged, and full of pig holes below. We have also seen some otherwise good Buckthorn hedges much injured by being left broad at the top, shading the lower portions, instead of shearing up to a sharp peak at top. Hedges will never succeed well under the dense shade of large trees. Cultivation during their growth, is as necessary as for a field of corn—the earth must be kept clean and mellow on each side.

"I shall look with eager interest to the Horticultural Department. Although there is a list of fruit recommended for general cultivation, for instance about forty pears, I know not which is the best. If a person wishes 20 of the best varieties, how shall he determine? I hope your paper will give the information desired. SAMUEL BURRITT." *Union Vale, Susquehanna Co., Pa., March* 12, 1853.

The following list comprises twenty exeellent pears, and if a smaller selection is wanted, those in *italics* may be taken as the best of the twenty: *Madeleine*, Doyenne d' Ete, Osband's Summer, Golden Bilboa, Rostiezer, *Tyson*, *Bartlett*, *Washington*, *Flemish Beauty*, *White Doyenne*, *Louise Bonne of Jersey*, Beurre Bosc, Autumn Paradise, Beurre d' Anjou, Dix, Fulton, *Winkfield*, Glout Morceau, Doyenne gris d' Hiver, Easter Beurre.

QUINCE STOCKS—FOREIGN GRAPES FOR MARKET.—I wish to inquire if quince stocks raised from seed of the common quince, will answer to bud the pear on.

Also, whether raising the Black Hamburgh and other foreign grapes under glass, can be made profitable for market. An answer to these will oblige H. A.

The common or Orange Quince, for most varieties of the pear, does not succeed so well as the French Quince—some sorts, indeed, that succeed well for a time on the latter, absolutely refuse to grow on the former. There are, however, a few pears, that are so much at home on quince stocks, as to succeed nearly or quite as well on the common quince as on any other, among which we may name the Louise Bonne of Jersey and Angouleme.

With regard to grape-houses for marketing, our own observations lead to the conclusion that on a large scale, systematically and *skillfully* conducted near a large city market, raising the Black Hamburgh may afford a fair, but not heavy profit. In ordinary cases it pays expenses, affords the family a beautiful luxury, and the grape house is an attractive ornament.

The Augusta Rose.

This rose, which has been described in former volumes of the Horticulturist, is this spring for the first time offered to the public, by its proprietors, Messrs THORP, SMITH, HANCHETT & Co., of Syracuse. It was raised from seed gathered in the garden at Mount Vernon, by Hon. JAMES MATTHEWS, M. C. of Ohio, who, finding it to be superior to any rose with which he was acquainted, and believing it to be worthy of extensive propagation, presented it to Mr. FAHNESTOCK, one of the above firm, who have propagated it for two or three years past, and found it to equal the high encomiums given to it by Mr. M. Great as is the list of roses already enumerated in the catalogues of our nurserymen, we are inclined to think the "Augusta" will prove a very valuable acquisition. It is represented by those who have seen it in the grounds of the proprietors at Syracuse, as a variety of rare, and in some respects, unequalled excellence—a climber of rapid and vigorous growth, with rich foliage, and a profuse and perpetual bloomer. The flowers are a fine yellow, deeper than the Cloth of Gold, and of a delicious fragrance, not surpassed by the finest of the Tea roses. With such qualities it cannot fail to be a universal favorite.

INFLUENCE OF UNFROZEN LAKES.—The influence of large unfrozen bodies of water, in softening the severity of sharp frosts in winter, is familiar to intelligent cultivators of fruit and tender plants. An interesting example is given by Dr. KIRTLAND of Cleveland, in a late number of Silliman's Journal. At his residence, half a mile from the south shore of Lake Erie, the temperature of the air has in no instance in ten years, fallen below zero; while at Columbus, Marietta, and Cincinnati, lying from one and a half to two and a half degrees further south, the thermometer frequently sinks to 5° and occasionally to 10° below zero.

COMPOST TO PREVENT POTATO-ROT.—T. A. Smith, of Syracuse, has published in the Rural New-Yorker, an account of a successful experiment in preventing potato rot. He purchased two bushels of refuse potatoes, of the long pink-eye sort, a variety very liable to rot, and in planting them, put about half a pint of the following compound into each hill:—One part of gypsum, three parts hen manure, four parts charcoal, and ten parts "salt ashes," (unleached ashes from the salt works, supposed to contain 5 to 10 per cent of salt.) Half the eyes had been destroyed by the rot—the soil was gravelly loam resting on dry sub-soil, and the crop suffered some from drouth. The result was 12 bushels of medium sized potatoes, *with every tuber sound.*

The Grazier.

Guenon's Mode of Examining Milch Cows.

"In the November No. you speak of Guenon's mode of examining cows, as something that has been published in the Cultivator—if so, I have failed in finding it, and wish it might be published again. Respectfully yours, JOHN BUTLER. *Lisle, Broome Co., N. Y., Jan.,* '53."

We believe that a notice only of this method of determining by external examination the value of cows, has ever been published in the Cultivator. To give even an outline of the minute directions of GUENON, would require more space than we could devote to the subject—besides which, it is believed by many that he has gone into a minuteness of detail beyond the practicability of clear and distinct actual examination by those who have not devoted years to the subject.

But in order to give a single glance at the leading principle of his mode, we furnish the accompanying figures in illustration. Guenon's chief rule consists in the breadth of the "escutcheon," or space immediately behind the milk bag and contiguous parts, contained within the boundary lines, formed by the meeting of hair growing in opposite directions. The hair on the escutcheon grows upwards and meets with the hair on the other parts. In the very best cows, or those which give the greatest quantity of milk, and also continue in milk a long time, or the year round, the escutcheon is very broad, and extends upwards to the root of the tail, as shown in Fig. 1. Such animals are very rare, and in ordinary

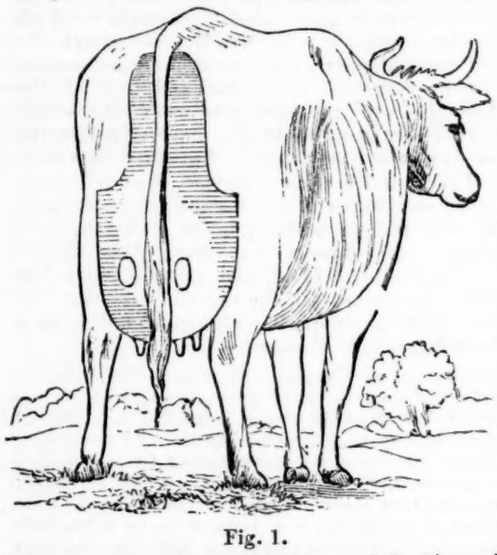


Fig. 1.

instances, and under good feeding and keeping, will yield about six gallons of milk per day. In less perfect animals, the escutcheon will be narrower, and frequently will extend only part way to the tail, and so in different cows diminishing in breadth until it reaches the medium, which is found to exist in the greatest number by far, of all milch cows. In poor milkers, it is quite small, as in Fig. 2; it varies also considerably in shape, but the same general rule applies to all shapes, namely, that the *area* of this escutcheon is an accurate indication of the amount of milk any cow will give. Guenon figures and describes no less than *seventy-two* different forms and sizes of escutcheons, all exemplifying this general rule, with a few exceptions, which he states, but which we cannot here point out, and all indicating with much accuracy the *quantity* of milk given, its *quality* and *duration*. Those who wish to go into a minute examination of the subject, will do well to procure Guenon's book, which is

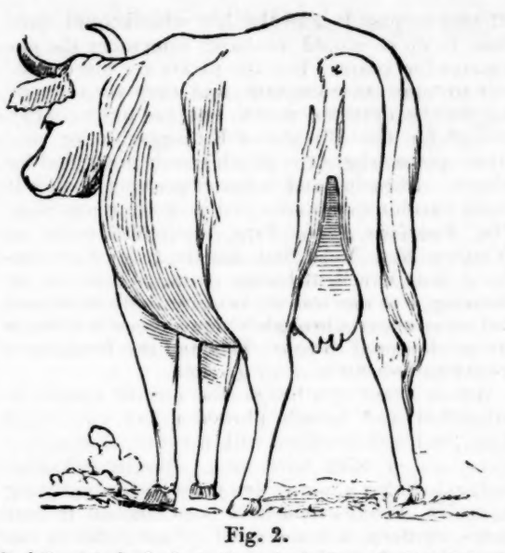


Fig. 2.

doubtless to be had at the principal agricultural book stores.

Several dairymen who have given some attention to this method, inform us that in general it is valuable and reliable. The late E. PHINNEY of Massachusetts, gave it a thorough examination and test, but he did not find it infallible, as there were some excellent milkers that had no escutcheons whatever. But in all cases where this mark was developed at all, it was found to be "a very sure indication," and proved a most valuable aid in the selection of cows and heifers for the dairy—the more valuable, because as well developed in the calf as in the fully grown cow.

Profits of Feeding Cattle.

As your paper is designed to meet the wants of practical farmers, in order that this large and increasing class of our population may be profited, it is necessary that they furnish such information as may be in their possession, for the benefit of others. Let every cultivator of the soil bear in mind, that in a *joint stock concern* of this nature, every one must, or should, in this way, put in his share of the capital, so as to enable every share-holder, (or reader of an agricultural paper,) to receive a dividend weekly or monthly, as the case may be. And as all holders of claims against monied companies, promptly present their demands for payment, so let all holders of difficulties in agricultural affairs, present them for solution. In this way may an interest in the pages of an agricultural paper be kept up, and information be scattered broadcast over our beloved country.

In accordance with these views, allow me to make a statement in regard to feeding cattle. It has been a common practice in this section, either to feed our *cull* cows of the dairy in the fall of the year for beef, or sell to speculators at a *low figure;* and, in the absence of any direct and certain knowledge of the results, it has generally been supposed to be a losing process. An occasional drouth finds us over stocked with store cattle, and in a section where dairying forms an important branch of business, a large number of cows become yearly superannuated. The inquiry, then, what we shall do with the surplus, and whether we can profitably convert it into beef, becomes deeply interesting to every man who keeps even one cow.

August 1, 1852, I dried three cows selected from that part of the herd which is not up to the merchant's rule of *small profits*, &c. October 1, they were offered at $7.00 per head, but no purchaser was found at that low figure, although they were in good *keeping* condition.

Soon after this date I commenced feeding, and kept an accurate account, as follows:

Three cows,	$21 00
Eight loads pumpkins,	6 00
Thirty bushels ears cull corn,	10 00
Twenty-four bushels potatoes,	5 00
Hay and grass,	3 00
Total cost,	$45 00
Profit,	23 00
Dressed 1,700 lbs., sold at 4c	$68 00

They were of the native breed or stock, fed in stalls after cool weather, with the *run* of a small lot in the the middle of the day, to sun themselves and drink. The manure is supposed to pay the trouble of feeding, &c. This leaves a net profit as above, of $23.00, or taking the cost of the *raw material*, produces beef at 2 1-2 cents per pound.

It is generally conceded to be a great saving of feed to stable stock, and especially cows, in this cold climate, and some maintain, (myself among the number,) that they should not be let out of the yard in the cold season, to be pierced through with the cold winter winds, traveling to and from stacks to find their morning rations, as is the common practice, but after having eaten their morning rations peaceably in their stalls, be suffered to lie quietly in a warm yard, provided with a supply of water, until the time to feed again. But at this point of our inquiry an important objection meets us, which is, an *asserted material reduction* in the value of hay, after having been removed from the place where first packed, when fresh and pliable. Few dairymen and graziers here, can conveniently have a barn large enough to stable their cattle, and at the same time hold hay sufficient to feed through our long and cold winters—but find themselves under necessity of storing a considerable quantity of their hay in the meadows, to be fed to stock in the open lots, when driven from their stables, or else to be drawn to the barn from time to time, as the mows are emptied. Thus the cold winds blow through it, dry up its moisture, drive out its sweetness, rendering it hard, brittle, and unpalatable, reducing its value from 15 to 25 per cent. So say our old farmers. Have any of your numerous readers ever given the moving of hay in winter a fair trial, so as to be able to tell with any certainty, whether there is a loss, and if so, what per cent, and in what it consists. A correct understanding of this subject would be of great value to many of your readers, and well might they say the money expended for your paper was like "good seed sown in good ground, bringing forth some thirty, some sixty, and some an hundred fold." But such information must be based upon carefully conducted experiments. If any such experiments have been made, we hope they may soon see the light. VERMONTER.

☞ We shall be glad to receive from the above correspondent, his promised "sketch of cheese dairying," as conducted in his vicinity—also, his experience in any other branch of rural economy.—EDS.

Lice on Calves.

MESSRS. EDITORS—Having a pair of spring calves, and feeding them with good, bright early cut hay, as much as they wanted to eat, together with a portion of oil meal, twice a day, and observing at the same time, that they were growing poor, rough, and homely, instead of thriving, and appearing sleek and handsome, I examined them closely, and found that they were covered with lice, almost innumerable. Being determined to destroy them, I took one quart of soft soap, and hot rain-water enough to work it into a good lather, and if a pair of calves ever got a thorough scrubbing, they were the ones. It did not seem to make them sick, nor to injure their appetites. About one week from that time, the lice were quite thinned out; and now, a little over two weeks since they got the scrubbing, I can scarcely find a louse on them. The calves are now on the gain, and I have no doubt but what they will do well. JOHN DIEHL. *Bristol, Ohio, Feb.* 7, 1853.

Policy of Shelter.

MESSRS. EDITORS—I noticed in your first number an article entitled, "What shall we do for fodder this winter," in which were adduced the theories of animal combustion, and some conclusions drawn from them. Knowing that thorough investigation is essential to true progress, and true progress is what we, as farmers, wish, I have ventured to advance a few ideas, as they occurred to me on its perusal—not in a spirit of opposition, but for the sake of information. Without discussing the truth of the theory, that artificial warmth may be a means of economizing fodder, I ask, is it the policy of our farmers to adopt it? No one, probably, will deny that it is the interest of every farmer to keep a healthy, well-constitutioned stock, that will be hardy and active in our bleak, borean winfers. Now all animal systems are more or less alike. What is the case with man? Confinement to warm rooms, inactivity, &c., are some of the most fruitful means of physical degeneracy. The alarming extent of disease, especially consumption, among the females of our country, is proof sufficient of the evils of confinement to heated rooms and sedentary employments. The high bred women of England engage in the *manly* sports of our own country, and the extent of their physical powers, and the quantities of the necessaries and the luxuries of life that disappear before them after a morning's fox-hunt, would really frighten a fashionable lady of our country. The men of the revolution, born and bred amid all the privations and hardships of a barren frontier, made herculean men of far different mould from the effeminate city bred of to-day.

Among animals, take the example of the horse. The Vermont horses are becoming noted for their speed, bottom, and power of endurance; but doubtless a great portion of this real worth is attributabble to their early management. It is no uncommon thing to find those stallions, whose stock proves the best, in the threshing machine, harnessed to huge loads of wood, or the railroad cart, a greater part of the year. Thus developing the muscles and improving the constitution, while the younger colts are left to pick up the oats left by the sheep, and shift for themselves,—afterwards to make the fastest, most hardy and high-priced Morgans and Black Hawks.

Cattle are affected much in the same way, and if you wish a hardy muscular yoke of oxen, it is the common remark, "buy those that have plenty of air and exercise." Sheep are even more affected than either cattle or horses, by confinment. Shut up in warm sheds, lying upon their own manure, they soon become diseased and fail. An instance occurred under the writer's own observation, last winter, ('51–'52,) so unusual for its severity. A flock, about sixty half-blooded Merino and Leicester sheep, were fed in racks in a warm shed, with ample entrances at the side and end, but with no opportunity for the wind to reach them. The manure did not freeze, but they were dry, and apparently very comfortable. Everybody said those sheep would do nicely, but before spring they declined in flesh, and the *rot* began to attack them; they were only saved by being driven out to the open air, and there kept the remainder of the winter.

It is farthest from my intention to advocate cruelty to animals, or that stock must be exposed; but experience seems to indicate there are ex-

tremes in this as well as other things, and reason sustains experience. Is it not making hot-house plants of our animals, by heating our barns and confining our stock in close apartments? Many of our best farmers in this section of Vermont, are even neglecting to blanket their horses, finding them less liable to colds, more hardy and vigorous; though their hair may be less glossy, and their general appearance less prepossessing. Do not these facts seem to indicate that warmth, though incontestibly it does lessen fodder, is not always a proper substitute for it.

The strength and power of the engine must not be sacrificed for the sake of its beauty, or the economy of its fuel. Its comparative power, beauty and expense, must all be considered. As I said before, I say not this to condemn any previous opinion, but to find out its real value,—to learn the true interests of the farmer, in developing the greatest muscular power of his animals at the least expense. C. S. H. *Peacham, Vt.*

This question, when stripped of the appendages which do not belong to it, is one of great simplicity. Our correspondent has unintentionally encumbered it with needless difficulties. By another examination of the article he comments upon, he will perceive that we have by no means admitted the propriety or necessity of confined air or the absence of cleanliness, which he seems to think inseparable from shelter. Every good stable is furnished with ventilators above, and some of the best farmers furnish their cattle apartments with side registers, which are kept closed on the windward side, and opened oposite. Every one who fears the care of this attention, and of the requisite labor for keeping stables cleaned twice or thrice a day, and well supplied with litter, will of course prefer to expose his animals, even though the loss thus sustained by exposure may far exceed the cost of labor expended for shelter.

The saving of food by promoting animal warmth, has long since been proved by innumerable trials, to be an incontrovertible FACT, and not a mere "theory," as our correspondent seems to suppose. Many of our best sheep farmers, have found so great an improvement both in the condition of their animals and in the quality of the wool afforded, as well as saving of life to the animals, and of the amount of food consumed, as to repay fully in two to three years the total cost of comfortable and substantial shelters. Instead of producing disease, we know of some who thus lose fewer animals in winter than in summer; but they were not, however, allowed to live and repose on their own manure, as in the case cited by C. S. H., but strict cleanliness was observed.

It is true, there is a physiological similarity between animals and human beings, and if farmers would but remember this, they would be less likely to permit the discomfort of filth to their horses and cattle, which often exists to a degree that would be insupportable to human beings. But to compare animals which are kept in clean, comfortable and well ventilated stables, mostly in a standing posture, with several hours run in an open yard, daily, in mild weather, to women, who keep themselves mostly in a sitting posture, in unventilated rooms, artificially heated, with not five minutes of open air, is a very great mistake. Does our correspondent think that a farmer and his family would enjoy better health, and be freer from colds, croups, and consumptions, if not even allowed the shelter of the barn, without fire heat, or even the protection of a high board fence, to sleep under? We have no doubt such treatment would make the race hardier; but it would be through the certain destruction of all but the very hardiest of persons, whose iron constitutions would of course be transmitted to their posterity. But such treatment would not help those who are tender, but only enfeeble and wear them out by hardships—a result we have repeatedly witnessed on unduly exposed animals. Strength of constitution and hardiness of frame are promoted in the highest degree when there is no suffering for the lack of comfort, when there is not a constant draft upon flesh and animal vigor, by exposure to snow, rain and stormy winds.

Abortion in Cows.

A correspondent, (S. R. S., of Blooming Grove, Orange co.,) wishes to know the cause of abortion in cows. He assures us that his cows are in good condition, are kept in stables above ground, and are kept there only in muddy, cold, or stormy weather. Finding the disease contagious, he immediately separates affected ones.

Without being able to assign the cause in this particular instance, we can only state what are usually regarded as the most prominent causes, viz: confined or impure air in stables, stall feeding without sufficient and regular exercise, impure water, bad hay, or stale grain, &c., which are supposed to cause flatulency, and increase the danger. Offensive odors, especially of putrid flesh or putrid blood, are supposed to produce a nervous influence, and strongly to contribute to this result. The ergot of rye is known to have a powerful tendency in the same direction, and it is thought that the ergot which grows upon other plants, as some species of grass, on wheat, and Indian corn, and which are found more abundantly in certain localities, and in certain seasons, may also tend to produce abortion. All the cows of a herd being alike affected by all these causes, when the first animal loses her calf, the peculiar odor which she imparts, and which the others by their keen sense quickly perceive, tends powerfully to produce the same disaster throughout the herd.

The remedy consists in avoiding all the exciting causes, and in moderate and regular feeding, wholesome food, pure water, pure air, moderate exercise, clean bedding, currying, and general attention to comfort.

APPLES FOR DOMESTIC ANIMALS.—A correspondent of the Ohio Farmer, who has experimented to a considerable extent during the past abundant season, thinks there is nothing better for milch cows, when fed to them in proper quantities. The quantity should be small at first, and increased to a peck twice a day for each cow. He finds them worth more to beef cattle than pumpkins, and to calves than shorts. Cooked and mixed with meal or shorts, they are excellent during the earlier stages of fattening hogs. We have found them to increase the milk of cows one half more when fed to them in winter, in rather less quantities than above stated: and to be very fine as green food for horses, when fed on hay. Farmers need not fear to plant out plenty of apple trees of productive sorts, for if the market should ever become glutted, they could never come amiss as food for cattle, hogs, sheep, horses, &c.

BROADWAY SHANGHAI.

ORIGINAL SHANGHAI.

Resemblance between Man and Animals.

Some years ago, a book was published from the pen of J. W. Redfield, M. D., advocating the theory that a resemblance, more or less marked, between men and animals existed, to the support of which a variety of comico-serious illustrations are introduced. It was shown that animals possessed of superior instinct, amounting almost to intelligence, bore the most perfect similitude to the human phiz—there being only slight differences of expression and the position of features between the horse, sheep, or dog, and the countenance of men.

The Knickerbocker for February, gives the above illustration of this similarity of physiognomy, which goes to show that the principle is world wide in its application; for, despite the difference of climate and education, the Shanghai fowl and the Broadway "cock of the walk," are strikingly alike. It is a cheering thought to the breeders of the larger varieties of poultry, that the breeds they are endeavoring to improve are so nearly allied to the genus *homo;* while it will in no way mortify the pride of the Broadway dandy, to be apprised that his form and address are of foreign importation.

Simple Stump Machine.—A simple contrivance for removing stumps, similar to one we have known for many years, is described in a late number of the Michigan Farmer, and which, the editor was informed, had taken out a hundred and forty stumps in half a day. We have no doubt this could be done, if the stumps were of moderate size, and the roots partly decayed. The contrivance is simply this:—A stiff, massive lever, about twenty feet long, is placed with its thick or stronger end at the side of the stump; a chain several feet long, with links made of inch, or inch and a quarter iron, and with a long ring at one end, is then attached to the end of the pole by means of the ring, and the rest of the chain passed round the stump, and hooked into a root or into the body. A yoke of oxen now attached to the other or smaller end of the lever, exerts an enormous power, and unless the stump is quite large, will quickly twist it out.

Preserving Shingles.—Every one who builds houses has observed the gradually increasing scarcity of shingles, and tin, zinc, and tiling are beginning to rise into view. If, however, some application could be made to shingles to render them very durable, they would be extensively used for a long time to come. Gas tar is cheap and good, but its blackness causes warping by absorbing all the heating rays and makes very hot and uncomfortable attics and garrets. We have lately seen the following application strongly recommended as an excellent perservative for many years. A pound of potash and a pound of salt are dissolved in four gallons of lime wash, and while the whole is boiling, a handful of shingles, held by the tips, is dipped in, and placed on the ends, on a board so that the drainage, shall run back into the kettle. When well dried, they are laid on the roof. Yellow ochre, Venetian Red, or umber may be mixed to give a suitable color, but the lighter the color, the more durable the shingles, and the cooler the attic.

Paint for Brick Houses.—A correspondent of the Ohio Farmer has used a cheap and very durable paint for the exterior of brick dwellings, which has already stood several years, and is now quite as fresh as when first applied. It consists simply of lime wash, with sulphate of zinc as a fixing ingredient Any requisite shade is given by adding the colors used by house painters. A clear and rich cream color may be obtained by applying yellow ochre to the common new brick, a livelier and warmer shade will be added by a little Venetian Red. Burnt sienna may likewise be used. This paint is far cheaper than oil paint, costs but little more than common whitewash, and nothing will remove it but the severest friction.

Notes for the Month.

To SUBSCRIBERS.—We wish to call your attention to the promise in the Jan. No., that the present volume should, in quantity and quality of matter, be equal to any previous one, and ask you if our word has not been fulfilled to the letter and spirit? Believing that the universal answer will be in the affirmative, we wish to make one request, and that is, if you are pleased with THE CULTIVATOR—if you are satisfied that it is an efficient aid to your success as farmers, that you will endeavor to increase its circulation. Show your approval and your faith by your works, and we shall have it in our power to continue to furnish you with the *greatest* amount of valuable agricultural reading at the *least* price. We can supply back numbers to any extent, and future ones of an equally valuable character. If you know of a single farmer in your town who does not take an agricultural paper, solicit him to pay fifty cents for THE CULTIVATOR, and if he declines make him a present of it, and thus help on the work of agricultural reformation.

If you choose a paper of more varied character, containing the same agricultural matter as the Cultivator, and much more, with pleasant and instructive reading for the Fireside, a little humor for a leisure hour, a concise record of the times, and a full report of the produce market, THE COUNTRY GENTLEMAN, WEEKLY AT TWO DOLLARS A YEAR, is just the thing.

We will send specimens of the Country Gentleman to any who wish to examine it. Its typography is unrivalled by any journal in the country, and its contents will bear perusal.

TO CORRESPONDENTS.—Notwithstanding our efforts to condense and crowd all we can, into the pages of the CULTIVATOR, many valuable papers from our correspondents have to be inserted in the COUNTRY GENTLEMAN only; and it is proper to say, that in selecting for the Cultivator, we have to be guided in a great degree by the arrangements of our printers in the use of their type; and that no correspondent must therefore conclude that his communication is omitted from the Cultivator, because we consider it not equal to those published. We do not publish anything in our weekly sheet, which we should not gladly publish in the monthly, did its limits admit of it.

☞ The senior editor of this paper, having, after ten years of active service, declined a re-election as treasurer or a member of the Executive Committee of the State Ag. Society, deems it not improper on this occasion, to tender his thanks to the members of the Executive Committee, for their kind appreciation of his services, as manifested in the following resolutions, which were unanimously adopted, at a meeting of the Executive Committee, in January of last year, but which have not heretofore appeared in his pages:

WHEREAS it is the opinion of this board, that the New-York State Agricultural Society is greatly indebted to Mr. LUTHER TUCKER for his able, efficient and long continued labors, as a member of the Executive Committee, having acted as its secretary and business officer for the first three years after its reorganization, in 1841, and aided most efficiently in perfecting its organization, and in carrying into successful operation its first Fairs at Syracuse, Albany and Rochester, furnishing an office for the Executive Committee, the necessary stationery, &c., for the three years; preparing for the press, and superintending the printing and distribution of its Transactions, and performing all the duties devolving upon its local Secretary, for all of which, as well as the expense incurred by him in the performance of these services, he declined to receive any reward; and,

Whereas Mr. TUCKER has, with the exception of the year 1844, when he declined to act as Secretary, on the ground that the Society was then quite able to pay for such services, and the year 1847, when he again declined the secretaryship, to which he had been elected, served the Society, as a member of this Board, or as its Secretary or Treasurer, from its reorganization to the present time, without remuneration, except for the year 1845, when he was allowed $300, an amount less by $250 than was paid for the same services the previous year: therefore,

Resolved, as the unanimous opinion of this Board, that to no man more than to Mr. TUCKER is the Society indebted for its present highly prosperous condition, and that the thanks of the Executive Committee, together with a service of plate to the value of $500, be presented to him, as a testimonial of their high appreciation of his services and character.

COL. SHERWOOD'S SHORT-HORNS.—The simple announcement of the fact that Col. SHERWOOD proposes to sell his fine herd of Short-horns, will be sufficient to attract the attention of breeders of fine cattle throughout the country, to his advertisement given in another part of this paper. Col. S. has devoted his attention to the breeding of Short-horns for many years, and has spared no expense necessary to enable him to avail himself of the best stock to be procured either at home or abroad. The success which has attended his efforts, has been witnessed by the thousands who have attended the exhibitions of our State Ag. Society, and has been abundantly proved by the high figures at which animals from his herd have been held for years past. He now offers about thirty head, to be sold at auction at his farm in Auburn, in June next—a sale which will equal in attraction to breeders any previous public sale in the state.

BEES—HYDROPATHIC TREATMENT.—Dr. Robinson, of Farmington. N. Y., informs us that he succeeded perfectly with a hive of bees that persisted in collecting in thick masses outside the hive and doing nothing. He bored a hole through the top, which happened, as he wished, to strike the space between the combs. He then fitted a small hive above the old one, and standing at a respectful distance with a syringe in his hands, continued to shoot the bees with delicate broadsides of cold water. They soon retreated to the interior, and ascending through the holes, occupied the new hive above. They immediately went to work to fill it, and in about five weeks it was found to contain twenty pounds of honey. Another person had accomplished the same purpose by covering the top with fresh branches of trees, and then imitating a shower of rain by drenching these branches with a watering pot.

GOOD SHEEP AND GOOD PRICES FOR THEM.—Messrs. HUNGERFORD & BRODIE, of Jefferson county, who received the first prize for the best fat long-wooled sheep at the late exhibition in this city, sold four of them to Mr. DAVID MOORE, of this city, for $130. They were four years old, and the heaviest weighed 268 lbs.

HOPS.—We give in this number, the third paper of our Otsego correspondent, on the culture of the Hop. This, with another on the expense, yield and profit of the crop, &c., will conclude the series. These papers have been read with a good deal of interest, the subject being one upon which but little has been written in this country; and they are the more valuable, being the result of the writer's own observation and experience. In a private note, he says—"I write nothing but what my own experience and judgment confirm. The Hop crop

has become a very important one in this country, and it is one on which but little has been written. I hope others will give their experience through your papers, and if it should differ widely from mine, I shall be glad to adopt whatever may be seen to be an improvement. Should any one wish further information, I shall be ready to answer any questions which the reading of my communications may suggest."

THE POULTRY ERA.—Some persons, we think, would be puzzled to decide whether the present point in the nineteenth century, will be most conspicuously marked in history by the self-manufacture of a French Emperor, or by the great poultry shows so often held in various parts of the world, but more particularly in the region extending from London to Chicago. The Bostonians have repeatedly made quite imposing display; the western states are not far behind; and now, we have the intelligence of a great exhibition of poultry in the city of London, patronized by the most distinguished noblemen of the kingdom, and visited by many of the foreign ambassadors, which leaves all the achievments of Yankeedom far in the lurch. We may talk about the "*mania*," but the British have some reason for stirring up a feeling of poultry-admiration; for they are importing annually from France upwards of a hundred millions of eggs, the duty on which amounted, in one year, to a little more than £25,000, or over a hundred thousand dollars.

This great metropolitan show included fowls, turkeys, geese, ducks, pigeons, and rabbits. There were over 600 pens of fowls (proper) alone, each pen containing from two to four. The Cochin Chinese took the lead far ahead of all others, and filled 249 pens. The Spanish, Dorkings, Hamburghs, Polands, Game, and Bantams, were in very respectable numbers. The pigeons occupied 249 pens, rabbits 48.

On the first day, the fee was five shillings, and several hundreds visited the collection. On subsequent days the price for admission was only one shilling; on the first of which 5,000 entered; on the next the number was much greater, and on the third and last it was computed that the number persons passing through the collection was nearly 12,000. The receips could have been scarcely less than at one of our great State Fairs.

A large portion of the collection was sold at auction, at the close, and some pens, we observe, brought about £50 or $250. The entire auction sales amounted to some $5,000. A large number of agriculturists present thought that the breeding of poultry was at present even more profitable than raising the finer sorts of cattle.

AG. SOCIETY FOR ALBANY COUNTY.—It will be seen by a notice in this paper, that a meeting is to be held in this city on the 14th of April, for the purpose of organizing an Agricultural Society for this county. This movement should find zealous advocates and firm supporters in the farmers of the county, and among the citizens generally. The disgrace of being without any organization, for the improvement of the rural arts and the development of the agricultural resources, has rested on this central and wealthy county long enough. From this cause the impression has gone abroad, that our soil is inferior, our farmers destitute of private enterprise, and lacking in public spirit. It remains for the farmers to remove this opprobrium, to take a prominent stand in the ranks of our agricultural societies, and demonstrate their claim to energy and ability, and prove the virtue and capability of the soil they cultivate.

A society was organized in 1841; but it failed to perform its duties, and consequently lost the bounty appropriated by the State, amounting to over $2000, which almost all the other counties secured. But it is not too late to retrieve our character. We have the example of other societies to stimulate and guide us, we have experienced and skillful farmers among us who can at once give character to our shows, we have men of wealth who can and will contribute to a fund necessary to a prosperous beginning, and we have abundance of farmers who need the benefits of an agricultural society, and will profit by them. We trust this design will not fail for want of hearty support, and to be successful, something more than a board of officers and a list of premiums is necessary. Farmers must be aroused, members solicited in all parts of the county, and the society be composed of the masses and made to promote their interests.

IMPROVED WATER WHEEL.—We take pleasure in calling the attention of our readers to the figure and description of an improved French Turbine Water Wheel, invented by Mr. Jagger, and manufactured by Jagger, Treadwell and Perry of this city. The inventor has, by a simple, common-sense application of a mechanical principle, rendered this important piece of mechanism more perfect and better adapted to its useful purposes, than anything of the kind before known. The improvement has been highly spoken of by the mechanical journals of the country and by all who have used them.

STOWELL'S EVERGREEN CORN.—In a communication from JONATHAN TALCOTT, of Rome, N. Y., who is a careful and skilful farmer, he informs us that this corn has failed to fulfill his expectations. He procured the seed from Longett & Griffing of New-York, at $1.50 per quart, and is ready to distribute what he has raised among his neighbors without price, that its qualities may be further tested. He adds that Prof. Mapes' directions for keeping were strictly observed. This result is similar to that of many others.

IRON SCYTHE SNATHS.—Inventors and manufacturers of machines could have learned much, if they had only given attention to the extraordinary examples of contrivance so numerously displayed in the works of creation. We may cite achromatic lenses as one example of this sort, which even Newton pronounced impracticable, while at the very moment he was writing that assertion, he was looking through two most perfectly constructed achromatic lenses, just like millions of others which had been in existence for thousands of years. The ancients were puzzled for a substance to write upon —wasps had been making paper since the creation—a crude, brown fabric, to be sure. Flies and tree frogs had for the same period illustrated practically the pressure of the atmosphere, and the principle of the suction pump, with beautifully constructed miniature machines; and the structure of the arch, which the more ancient nations, notwithstanding their superlative skill in masonry and architecture, knew nothing about, was well understood and constantly practiced all that time by a little mining ant. The most perfect form of a rod, shank, or beam, to combine strength and lightness, is illustrated by the tube of birds' quills, and by the straw of grains and grasses—the hollow rod or tube. This principle has been already applied in a number of instances; but not till now, the middle of the nineteenth century, has the hint been taken in the construction of scythe snaths,—implements in which lightness and strength are pre-eminently required. We observe by the patent office records, that these have been successfully manufactured by A., C. & C. N. CLOW, of Port Byron, N. Y., and learn that they promise great advantages on the score of durability, strength, lightness, and facility of being bent into any desirable form.

BRUSH DRAINS, are the cheapest underdrains we have ever constructed—and were made by simply filling the ditch nearly full with branches and brush, the buts pointing downwards or with the descent, the upper portions or tops being covered with inverted turf, and after treading down to one-half their original bulk, covered or filled in with earth. These have stood many years, and answered a good purpose, the air being excluded and decay prevented. We observe that a correspondent of Moore's New-Yorker states, that in Europe, these have been known to continue a hundred years, the ends or exposed parts, being finished with stones.

MACHINES AT STATE FAIRS.—J. L. POPE, of Manlius, N. Y., has pointed out some of the evils resulting from a frequent practice with machine-makers, in ex-

hibiting their most highly wrought and perfectly made machines at the State Fairs, and supplying the orders subsequently received on the merit of these beautiful exhibitions, with those of the roughest and most ordinary character. We can not find room for his communication entire, but only the following portions:—"A farmer attending a fair, sees an improved machine. It is made of the very best material, and with the most exquisite workmanship. It does the work assigned it, with precision and despatch. He orders one—announces his intentions to his neighbors—but when it arrives—how changed! He can scarcely recognize in the wretched machine before him, the least similarity to the beautiful one he had seen. Its performance proves a failure; and the neighbors are quite satisfied they are right in resisting all new things. A feeling of distrust towards all improvements is created." He does not wish to apply these remarks to the many honest machinists, whose work always satisfies every purchaser, and regrets that these should suffer, on account of the dishonesty of others.

The remedy he proposes—exposure in agricultural papers—would hardly be practicable. The community consists of a mixture of honest and reliable men, and those of an opposite character, and the public paper that should undertake to give a list of the latter class, would soon find the task attended with serious inconvenience. We know of no better rule than the one we once heard from a wise and shrewd man, "never to deal with a dishonest person, no matter how good a bargain (apparently) you can make." It may cost some time and inquiry to ascertain such machine makers as are worthy of the fullest confidence; but there are such men, and we know of no "royal road" to find them, other than through the labor of inquiry.

North River Agricultural Warehouse,

53 Cortland-street, New-York.

GEORGE H. BARR & CO., invite the attention of Farmers, Planters and others, to their large and varied assortment of Agricultural Implements, Manures, Seeds, &c. &c., all of which will be furnished at the lowest prices.—Their assortment includes

PLOWS—All the improved kinds by the most approved makers.

HORSE POWERS—Of all kinds and sizes, with and without Threshers, &c.

CORN SHELLERS—All the improved kinds, and some of recent introduction.

STRAW CUTTERS—Of all sizes and kinds, for hand and horse-power.

CORN AND COB CRUSHERS—Of all kinds and sizes.

FANNING MILLS, Cultivators, Harrows, Agricultural Barometers, Churns of all the approved kinds, Rakes, Hoes, Forks, and a general assortment of Horticultural and Garden Tools. April 1—It.

Plows.

AN Extensive assortment of the best Plows in use, embracing every variety of the celebrated Eagle Plows, manufactured expressly for us, together with the "Oneida;" the "Ne Plus Ultra," Peter Auld's Plow, Smith's Patent Sod and Subsoil Plow, &c., &c., Plow wheels and coulters. For sale at low prices at DANA BROTHERS,
April 1, 1853.—mIt 91 Genesee-st., Utica.

Mammoth Nutmeg Potato.

A FEW SACKS of these superior Potatoes may be had for seed of the subscribers. These Potatoes have never been diseased, and are as hard and firm when one year old, as when dug. They ripen in June, being among the earliest known variety. Price $2 per bushel.

North River Agricultural Warehouse,
53 Cortland-street, N. Y.,
April 1—It GEO. H BARR & CO.

Keeping Eggs Fresh.

TO any person that will send me One Dollar (post-paid,) and their written promise not to reveal it to others, I will send a Recipe, with full directions, by which I have kept eggs perfectly fresh for a year. The cost of material is but a trifle No recipe will be given without the promise not to reveal it, accompanies the money F. H. WILLIAMS,
April 1—tf Box 814, Syracuse, N. Y

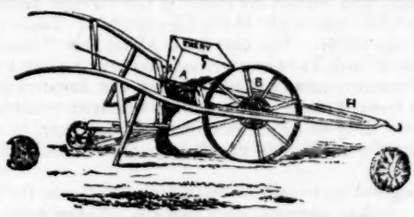
Prouty & Mear's Plow!

A LARGE assortment of these celebrated Plows can be found at the North River Agricultural Warehouse and Seed store, 53 Courtland-street, New-York.
April 1—It GEO. H. BARR & CO.

Seeds.

THE undersigned being aware of the strong prejudice existing among Market Gardeners and others, in relation to seeds as usually sold by Agricultural Warehouses, have engaged the services of Mr. James Hogg, so long known to the public as a competent Seedsman, and have placed this department of their business under his control. They have also made arrangements with Prof. Mapes, and others engaged in seed raising, to furnish them with an assortment of the choicest seeds. The Foreign and California arrangements will ensure, in addition to garden seeds, a fine assortment of Bulbs, Flower Seeds, &c., &c.

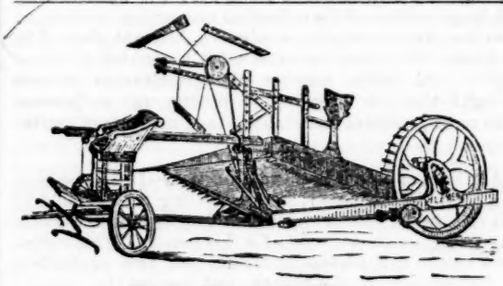
GEO. H. BARR & CO,
North River Agricultural Warehouse,
April 1—It 53 Cortland-street, N. Y.



Emery's Seed and Corn Planter.

THIS Machine has now been in use for six years, and the demand for them is constantly increasing—they have been very generally introduced, and are acknowledged the best machine now in use for the purposes designed. It has received many premiums, in competition with other good machines. It plants all kinds of seeds with equal accuracy being well adapted to the smallest seeds in drills, and for corn, peas, beans, &c., it has no superior. It can be used to plant in hills or drills, and used by hand or horse power. It is driven by a geer motion without bands, which insures a constant and uniform action. Price $14.

For sale at the Albany Agricultural Works and Warehouse of EMERY & CO., 369, 371 and 373 Broadway, Albany. April 1, 1853.



H. L. Emery's Reaper.

THE particular attention of Farmers who are contemplating purchasing Mowing and Reaping Machines, is called to the new invention of H. L. Emery.

Brief descriptions with cuts, illustrating the same, were mailed with the February Number of Cultivator as an Extra. As these descriptions were too brief to show fully the several parts and their operation, and as many of the subscribers may not have received them, this notice is to say that full descriptions, terms of sale, &c., will be forwarded by mail to all applicants

They will be ready for delivery on and after the first of May. Price of Mower, with one set of extra knives, $110. Price for the attachments for reaping and delivering grain, $10 extra, and can be had with the mower, or at any time subsequent to it. For further information, address
April 1, 1853. H. L. EMERY, Albany.

Black Hawk Horse Raven.

THIS much admired horse, will stand at the stable of the subscriber, the coming season. Terms $10 the season. Good pasture provided at a reasonable price.

ROBBINS BATTELL.
Norfolk, Conn., April 1, 1853.—2t

Fruit and Ornamental Trees.

THE subscribers offer for sale at their Nursery in Waterloo, Seneca county N. Y., 2,000 Vergalieu Pear Trees, of two years growth, and from 4 to 6 feet high, at $35 per 100; $300 per 1000; a large quantity of Red Cedar at $5 per 100, $40 per 1000 American Arbor Vitæ at $3 per 100, $25 per 1000; and Osage Orange at $1 per 100, $8 per 1000.

Also a general assortment of Fruit and Ornamental Trees, Shrubs, Roses, &c., &c. Particular attention is given to the cultivation of hardy Evergreens, and we have a fine supply of Balsam Fir, Norway Spruce, White Spruce, Red Cedar, &c. Orders by mail will receive prompt attention, and trees packed in the best manner for transportation by canal or railways. For packing, a trifling charge will be made, to cover only cost of material.

Catalogues furnished. DELL & COLINS.
Waterloo, N. Y., March, 1853—11—3t—m1t.

Seed Potatoes—500 Bushels to the Acre.

A PREMIUM was awarded at the Winter Exhibition of the New York State Agricultural Society (see Report) to Peter Crispell, Jr., of Ulster county, for the largest yield of Potatoes, viz:—554 bushels from 1 17-100 acre; the kind cultivated was the Yam Potato. Of this particular variety a highly intelligent practical horticulturist of New Jersey writes us—"I have grown this excellent Potato for some years past, and have found it of most excellent eating quality, and superior to all kinds I have ever tried, in resisting the rot. Being of a hardier constitution and more solid texture, it retains its eating qualities later in the Spring than the other varieties. The character given to it by Mr. Smith, who introduced it into New York, and highly commended it to the attention of agriculturists, I am prepared to endorse. During the three years I have cultivated it, it has yielded me 20 bushels to 1—thus uniformly proving itself more prolific than any other variety in cultivation. (See 'Cultivator,' vol. 7. page 155, for 1850.")

The subscribers offer for sale 500 bush. of the Yam Potato, by the bushel, barrel or larger quantity.

Also the following standard varieties of Early Potatoes, viz: Early Sovereign, Early Ash, Leaf Kidney and Early June, well saved and healthy Seed.

Also every variety of Vegetable, Flower and Field Seeds, of the finest qualities, at wholesale or retail. Catalogues furnished on application. J. M. THORBURN & Co.,
Seedsmen, Florists, &c.,
March 17—11—3t—m1t. 15 John Street, N. Y.

Thorough Bred Devons For Sale.

THE undersigned offer for sale the following:—

BULLS.—1st. "*Uncas*,"—calved March 19th, 1851. 1st prize at the show of the American Institute, 1852. Sire "Megunticook;" grand-sire, "Prince Albert," (102); dam, "Nonpareille, by Lord Lynedock."

2d. "*Red Jacket*"—calved May 5th, 1852. 1st prize as calf at show of American Institute, 1852. Sire, "Megunticook;" grand-sire, "Prince Albert." (102); dam, "Meadow Lilly," by "Baronet," (6); g. d. "Helena."

3d. "*Osceola*"—calved September 11th, 1852. Sire, "May boy," (71); grand-sire, "Duke of York," (37); dam, "Moss-rose," by "Duke of York," (37); g. d. "Nonpareille," by "Lord Lynedock."

4th. "*Dacotah*"—calved October 29th, 1852. Sire, "May-boy," (71); grand sire, "Duke of York," (37); dam, "Red-bud," by "Megunticook;" g. d. "Nonpareille," by Lord Lynedock.

HEIFERS.—1st. "*Rose*"—calved October, 1849; bred by Mr. R. C. Gapper, Canada West. Sire, "Major;" grand-sire. "Billy;" dam, "Cherry," by "Billy;" grand-dam, "Beauty."

2d. "*Gazelle*"—calved October, 1850; bred by Mr. R. C. Gapper, C. W. Sire, "Rob Roy;" grand-sire, "Santa-Anna;" dam, "Cherry," by "Billy;" g. d. "Beauty."

These animals are of the best blood to be found in England. "Megunticook," "May-boy," and "Nonpareille," having been imported from the herd of George Turner, Esq., and "Helena," from that of James Quartly, Esq., by ourselves; while "Billy" and "Beauty," were imported by Mr. Gapper, from that of James Davy.

With the rest of our herd, they may be seen at all times, on our farm, 3 miles from the Rhinebeck station of Hudson River Railroad.

The figures in brackets refer to the English Herd Book.—Animals delivered, free of expense, in Albany or New-York.
W. P. & C. S. WAINWRIGHT.
Rhinebeck, Dutchess co. N. Y.—March 1—m3t

Choice Vegetable Seeds.

A LARGE assortment, raised expressly for our sales.
LONGETT & GRIFFING, No. 25 Cliff St.,
March 1—2t. near Fulton, New-York.

Fertilizers.

GENUINE *Peruvian Guano*, fresh from ship; just imported.

Super-Phosphate of Lime, a superior article, the best in this market.

Bone Dust, ground fine, and Sawings.

Poudrette, of the best manufacture.

Plaster of Paris, ground and in barrels.

R. L. ALLEN, New-York Agricultural Warehouse and Seed Store, 189 and 191 Water st., N. Y. March 1—tf.

Choice Garden Seeds and Flowers.

A CHOICE selection of the best early, middle, and late Garden Seeds, fresh imported from Europe, and grown in this country, expressly for me.

Flower Seeds—A fine assortment of all the best sorts.

R. L. ALLEN, New-York Agricultural Warehouse and Seed Store, 189 and 191 Water St., N. Y. March 1—tf.

Horticultural Implements.

PRUNING Shears, and all other implements used in the Conservatory, Flower and Fruit Garden.

Hand Plows and Cultivators, Rollers, Trowels, Scufflers, Hoes, Shovels, Spades, Rakes, Seed Sowers, and all other implements, of the newest and most improved kinds, for the Kitchen Garden. R. L. ALLEN,
New-York Agricultural Warehouse and Seed
March 1—tf. Store, 189 and 191 Water St., N. Y.

NURSERY OF J. J. THOMAS,
Macedon, Wayne County, N. Y.

ALL Fruit Trees sold at this Nursery are propagated from trees proved in bearing, and a selection of the best sorts made out of nearly *one thousand* proved varieties.

A large collection of APPLE TREES includes Gravenstein, Early Joe, Northern Spy, Baldwin, Rhode Island Greening, Strawberry, Porter, Fall Pippin, Swaar, and many others.

PEARS—*dwarfs*—Louise Bonne of Jersey, Winkfield, Angouleme, Tyson, &c. *Standards*—Virgalieu, Dix, Bartlett, Seckel, and others.

PEACHES—Tillotson, Early York, Crawford, Nivette and many other sorts.

CHERRIES—Early Purple Guigne, Tartarian, Holland Bigarreau, Elton, Knight's Early Black, Downer, Napoleon, Governor Wood, &c.

GRAPES—Isabella, Catawba, York Madeira, Clinton, Bland, Black Cluster, Malvoisie, Royal Muscadine, Black Hamburgh, &c.

RASPBERRIES—Franconia, Fastolff, Cretan, Red Antwerp, &c.

STRAWBERRIES—Burr's New Pine, Hovey's Boston Pine, Large Scarlet, Hudson, &c.

GOOSEBERRIES—Houghton's and many English sorts.

ORNAMENTAL TREES——Horsechestnuts, European Larch, Mountain Ash, Honey Locust, Weeping Ash, Ailanthus, Magnolia, &c.

EVERGREENS—Balsam, White Spruce, Deodar, Norway Fir, Silver Fir, &c

ORNAMENTAL SHRUBS—Deutzia, Fringe tree (white and purple.) Japan Quince, Dwarf Almond, Dwarf Horsechestnuts, Siberian Lilac, Crimson Currant, Tree Pæonia, Large flowering Philadelphus, Mezereon, Sweet-Scented Shrub, &c. SPIREAS—racemosa, double flowered prunifolia, and a dozen other fine sorts. HONEYSUCKLES—Tartarian, Scarlet Trumpet, Yellow Trumpet, Woodbine, Chinese Sweet-Scented, &c. BIGNONIA—great flowering, common crimson, &c.

CLIMBING ROSES—Queen of Prairies, Baltimore Belle, Crimson Boursalt, Queen of the Belgians, Pallida, Caradori Allan, Mount Joy, &c.

HYBRID PERPETUAL ROSES.—La Reine, Madame Laffay, Baron Prevost, Rivers, and many other brilliant sorts.

SUMMER ROSES.—Red Moss, Princess, Adelaide, and several other moss roses; Triumphe d' Abbeville, Fulgens, George IV, Latourterelle, and many others.

HERBACEOUS PERENNIAL PLANTS—a fine and very select collection, including many of the most splendid PÆONIES. as Pottsii, Reevesii, Humei, Whitleii, Fragrans, &c.; PHLOXES, including Van Houtii, Picta, Speciosa, Breck's Fleur de Marie, decussata, &c.; Spiræas, comprising lobata, aruncus, japonica, &c.; Iris, many fine sorts; Lythrums, Dictamnus, Delphiniums, Aconites, Baptisias, Campanulas, Funkias, Yuccas, &c., &c.

Catalogues gratis. Orders with remittances promptly filled. Packing done in the most secure manner for any distance by canal or railway. March 10—103t—m1t.

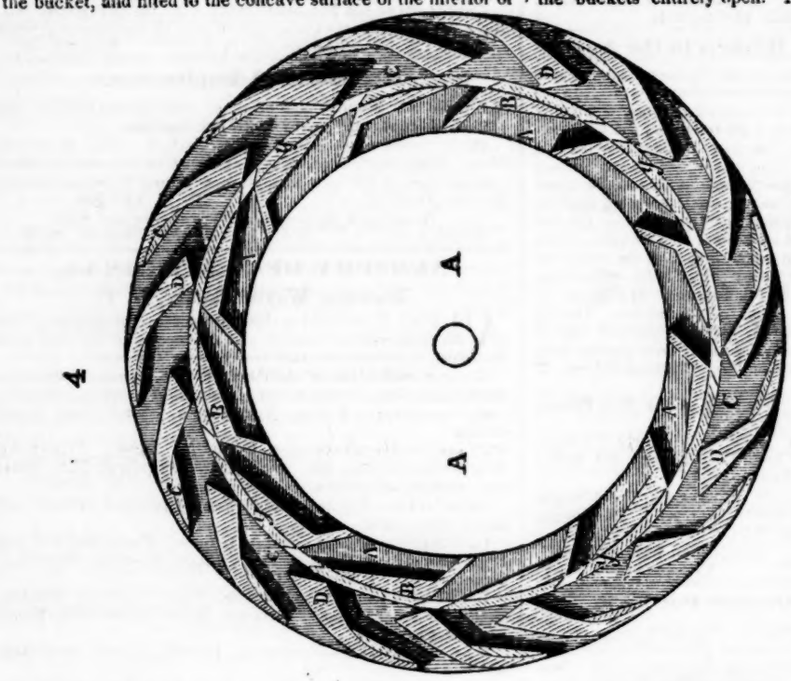
Devon Cows,

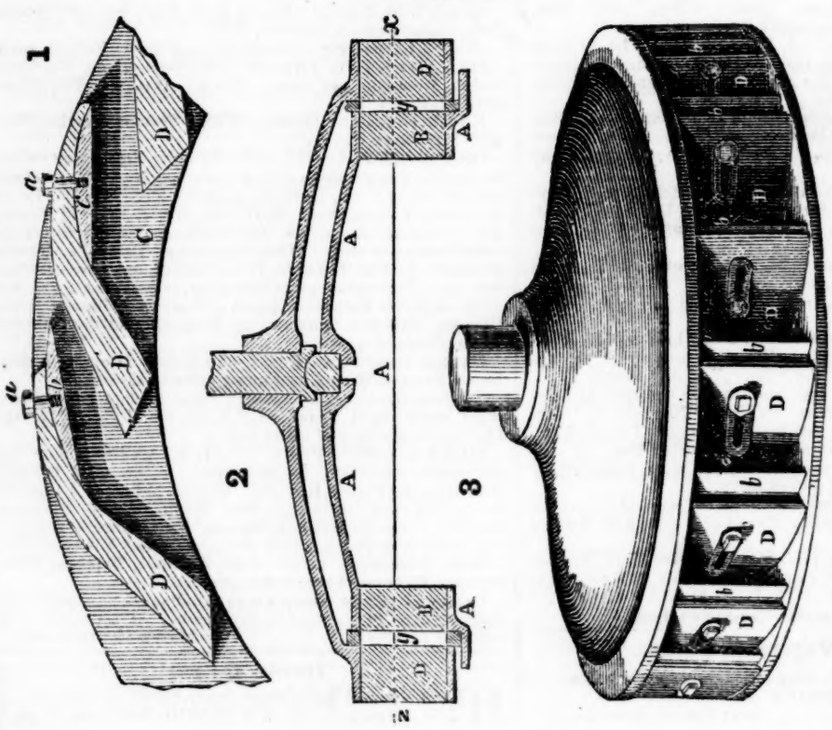
HEIFERS, and Bull Calves—pure blood—for sale by
Feb. 1—m1y. B. V. FRENCH, Braintree, Mass.

Jagger's Patent Turbine Water Wheel.

From the Scientific American of December 18, 1852.

THE annexed engravings are views of an improvement in the French Turbine Water Wheel, invented by IRA JAGGER, of the city of Albany, N. Y., and for which a patent was granted on the 19th of last October, (1852.) Figure 1 is an enlarged view of a part of the periphery of the wheel, with some buckets; figure 2 is a profile section through the centre; figure 3 is a perspective view of the wheel as set in its proper position, and figure 4 is a plan or horizontal section taken through *x y*. A. being the fixed part, or shute chamber, with the shutes B B, and C, the wheel with its adjustable buckets, the same letters refer to like parts. The improvement consists in a sliding gauge or lip secured to the extremity of each bucket, as shown at *a b c*, in the figures, for the extension of the bucket, and fitted to the concave surface of the interior of it, by means of which the orifice of discharge, and its direction is regulated according to the head under which the wheel works, and the amount of work to be done, and thus obtain the maximum effect with every varying head of water, also adapting the wheel to the work to be done, which in many cases varies a great deal. The lip is a rectangular plate of iron reaching from the top to the bottom of the bucket; its back surface next the bucket is curved so as to fit the curved surface of the bucket, its front surface being flat, and a chord to the curve of the back surface. This lip is secured in its place by a screw bolt, *a*, sliding through a slot in the bucket, and tapped into a lip, and is regulated by sliding the said lip to or from the bucket directly in front of it, so as to diminish or increase the space between it and that bucket as shown in figures 1 and 3, where the lip, *b*, is shown as nearly closing the exit passage, and the lip *c*, as leaving the space between the buckets entirely open. A gate is placed between the shute chamber and the wheel, by which to regulate the supply of water to the wheel, so that there may be a due proportion between the quantity of water pressing into the wheel and that flowing out, as shown in figures 2 and 4, at *y*. It is pierced with slots equal in size and corresponding in form to the external openings of the shutes, and has the edges of the slots bevelled so as to deliver the water with as little interruption as possible, in whatever situation they may be in reference to the openings in the shutes. The gate is moved or shifted round horizontally, so as to close to a greater or less degree, the openings of the shutes, by any mechanical device.





A very important object is claimed and obtained in this patent, viz., the adjustable lip sliding on the inner face of the buckets to regulate the openings between the outer edges of the buckets, and thereby the flow of water from the wheel, thus adapting the lines of this turbine to the head of water and amount of work to be done, however varying these may be. The water is taken in at the bottom of the wheel and every inch of head is made available. In some situations at different times of the year, the head and quantity of water vary greatly; this wheel is specially adapted for such places. The wheel is simple, strong and durable, and not liable to be obstructed by ice. The inventor is of the firm of Jagger, Treadwell & Perry, Eagle Foundery, Beaver st., Albany, N. Y., where good castings can always be assured, and from whom more information can be obtained by letter or otherwise. We would state here, that we have seen some *unsolicited* letters from respectable persons who have been

using this improved wheel, who speak in the highest terms of praise respecting its performances.

We are prepared to fill orders for these Wheels at short notice, and also for Mill Work of every description. Our assortment of Patterns is unequalled, having been collecting for more than 50 years. Mr. Jagger is a practical Millwright, and will be at all times ready to furnish information or drawings. Persons ordering wheels will please give a full description of the kind and amount of work to be performed, height of fall and quantity of water, length of shaft, and direction in which the wheel will be required to run.

JAGGER, TREADWELL & PERRY,
Eagle Foundry and Machinery Works,
April 1—3t. eom 110 Beaver Street, Albany, N. Y.

Balsam Firs, Arbor Vitæ, and other Forest Trees.

HENRY LITTLE & CO., of Bangor, Maine, will furnish any number of Evergreen and other Forest Trees, taken up with *earth on the roots*, with the greatest care, and sent to any part of the United States by steamboats or railroads, and carefully packed in large boxes, at short notice, at the following prices, viz:

From 6 inches to 1 foot, at 1 cent, or $10 per 1000.

From 1 foot to 2 feet, at 1½ cents, or $15 per 1000.

The above prices refer more particularly to Balsam Fir and Arbor Vitæ Trees.

We charge what the boxes cost, but nothing for packing.

For three years past, the trees we have procured and sent to a distance, have lived generally, and have given good satisfaction. Evergreens will not live unless taken up with great care. Bangor, Feb. 1, 1853—m3t

Highland Nurseries, Newburgh, N. Y.

A. SAUL & CO., in inviting the attention of their patrons and the public in general, to their very extensive collection of FRUIT AND ORNAMENTAL TREES, SHRUBS, &c., &c., would respectfully inform them that the stock which they offer for sale the coming spring, is unusually fine, both as regards quality of trees and variety of kinds, &c.

The soil and climate of the Hudson Highlands, have rendered proverbial the success of the trees sent from here, to all parts of the Union, and the accuracy and precision so indispensable in the propagation of fruit trees, for which this establishment has long been celebrated, render errors in nomenclature of rare occurrence.

They have propagated in large quantities, all the leading standard varieties, which are proved best adapted for general cultivation, especially those recommended by the American Pomological Society; as well as all novelties both of native and foreign origin.

To particularize, within the limits of an advertisement, would be impossible; they refer to their general catalogue, a copy of which will be sent to all *pre-paid* applicants, on enclosing a Post Office Stamp.

The following comprises a portion of their stock, and are all of fine growth, viz:

PEARS—in 400 varieties, both standards on their own stock, for orchard culture; and on Quince for dwarfs, Pyramids and Quenouille for garden culture.

APPLES—in over three hundred varieties, both standards, and Dwarfs, also Cherries, both standards and dwarfs, Plum, Apricot, Peach, Nectarine, and Quince trees in every variety.

GRAPE VINES—(both native and foreign for vineries.) Gooseberies, (50 best Lancashire varieties,) Currants, Raspberry and Strawberry plants of all leading and known kinds, together with Seakale plants, Asparagus and Rhubarb roots, &c, &c.

ORNAMENTAL TREES, Shrubs and Vines, both deciduous and evergreen, suitable for street and lawn planting, embracing all the new and rare Conifers, Weeping trees, and Shrubs of recent introduction.

ROSES—in every variety, including Hybrid Perpetual, Hybrid Bourbon, Hybrid China and Hybrid Damask; Prairie, Boursalt, Ayrshire, and other climbing and garden varieties, as well as the more tender; Tea, China, Bengal, Bourbon, and Noisette kinds.

HERBACEOUS PLANTS.—A large collection of Pæonias, Phloxes, Campanula, Penstemon, Œnothera, &c., &c.

DAHLIAS and bedding plants, for the parterre and flower garden, in large quantities and variety.

HEDGE PLANTS—100,000, 2 year old, Buckthorn and Osage Orange plants; Arborvitæ for screens, &c., &c.

Dealers and *Planters* of trees, on a large scale, will be dealt with on the most liberal terms.

Newburgh, Feb. 20th, 1853.—mar—2t

Colman's European Agriculture.

EUROPEAN AGRICULTURE, from personal observation, by HENRY COLMAN, of Massachusetts. Two large octavo vols. Price, when neatly bound, the same as published in Nos., $5. For sale at the office of THE CULTIVATOR.

Samuel Moulson

OFFERS for sale at the Old Rochester Nursery, a very select and extensive assortment of Standard and Dwarf Pear, Apple, and Cherry Trees, and a limited assortment of Peach and Plum of small size. Among the Apple Trees are 20,000 large Northern Spies. The Pears consist of over 50,000 of all the leading and well established sorts. 10,000 Giant Rhubarb, producing large petioles of first quality, that bear carriage for market purposes better than any other sort; $60 a thousand eyes, or $10 per 100. Osage Orange, 1 year old, $8 a thousand—2 years, $10.

Also a large assortment of Ornamental items. Priced lists, and an inventory of the stock, with the heights of each variety, sent to all post-paying applicants forwarding a one cent stamp.

Also will be published early in March, Hints on Planting Orchards, and Culture of Fruits, Descriptive Lists of best sorts, and a synopsis of M. D'Albret's mode of forming Pyramidal Trees, translated from the French. Will be sent by post, on 27 cts. being remitted in a prepaid envelope. Office 36 Front-street, Rochester. Feb. 24—8—1tm1t.

Evergreen and Deciduous Trees.

THE subscriber is prepared to furnish to order, American Arbor Vitæ, American Larch, or Hackmatack, Silver Fir, Red and Black Spruce, American Hemlock and White Pine.

Also Elm, Maple, Birch, Beech, Ash, and High Cranberries, at very low prices—6 inches to 6 feet high—faithfully taken up and packed, so as to bear rough handling, and go to any of the Western and Southern states—from Boston, by railroad and boats. For terms, &c., address, post-paid,

WM. MANN, Bangor, Me.

Feb. 10, 1853—m3t.

Valuable Potatoes for Sale.

THE subscriber offers the following valuable varieties for sale, a part of which are described in the last volume of the Transactions of the State Society.

This Society awarded him a special premium at the State Fair at Utica, and also $100 at their meeting at Albany during the present month, (Dec.,) as encouragement in these experimental efforts.

1st. *The Rough Purple Chili*, imported from South America, April, 1851, at a great expense. In yield, hardiness, and table quality, it has no equal. Price $10 per bushel.

This potato yielded me this year ninety-two from one, by measure; while to Mr. Delafield of Geneva, it yielded one hundred and twelve from one, by weight.

2nd. *Seedlings originated in* 1849. They are hardy, productive, and fit for the table. Price $3 per bushel.

Many of these have been tested this year, under the eye of the State Society, and have yielded from twenty to sixty-four, from one.

3d. *Seedlings of* 1852. These consist of many choice kinds, selected from four thousand two hundred varieties, grown mostly from seed balls of No. 1 and 2, above. This collection was made with great care in regard to hardiness, flesh, yield and mode of growth; and it is believed to afford a basis for the entire renewal of the potato crop in our country. Price $10 per bushel.

4th. *Potato seed—from the seed ball.* This was borne by No. 1 and 2 above. It has been proved, and is warranted to yield a large proportion of hardy, productive and shapely varieties. Price $1 per paper; each of which contains over one thousand seeds. These will be sent by mail, the postage to be paid by myself.

☞ Each parcel of potatoes ordered, will be put up with care, the kinds kept separate, and forwarded by express, canal, or private conveyance, as soon as the weather will permit, at the expense and risk of the purchaser.

Nos. 1 and 2 are advised for immediate field crops, and No. 3, for new sorts for the years following.

Persons passing through Utica, are invited to call and see specimens at the store of Wm. Bristol & Co., Druggists, No. 108 Genesee-street, or at the house of the subscriber, near the Insane Asylum. C. E GOODRICH.

☞ Orders answered for cash only.

REFERENCES—The Officers of the State Ag. Society; John Delafield, near Geneva; J. P. Fogg, of the Agricultural Warehouse, Rochester; Wm. Bristol & Co., Utica; Chas. Tracy, Esq. New-York city; C. L. Whiting, Granville, Ohio.

Utica, Feb. 15.—2t.

Devon Cattle.

THE subscriber offers for sale four full blood Devon Cattle one full blood two-year old Bull, and three Bull Calves The Cows sprung from the stock of the Messrs. Hurlbut's, which is well known for its goodness and purity of blood.

Address L. H. COLBY, Scipioville, Cayuga co., N. Y.

3—2tc2t

United States Agricultural Warehouseand Seedstore.

No. 197 Water street, near Fulton street, New-York.

MERCHANTS, Planters and Farmers, in want of AGRICULTURAL and HORTICULTURAL IMPLEMENTS or SEEDS, for shipping, plantation, farm or garden purposes, will please call and examine our extensive and superior assortment of goods in the above line, unsurpassed by any other house in the United States, for finish, material and workmanship, and of the most approved patterns; all of which we will sell on as good terms as any other house in this city.

We have among our assortment the far-famed and unequaled EAGLE D. & F. PLOWS, warranted to draw lighter and do as good work in sod or stubble ground, as any other Plow to be found in the United States.

We also have the highest premium Straw Cutters, Fan Mills, Grain Mills, Premium Stalk Cutters, Horse Powers, Threshers and Separators of different kinds; Ketchum's celebrated Mowing Machine, unsurpassed; Hussey's Reaping Machine —also, McCormick's Cotton Gins, Cotton Presses, Hay and Hide Presses, Brick Machines, Harrows of all kinds, Sugar Mills for plantation use, Sugar Mills for grocer's use, Hand Store Trucks of all kinds, Mule Carts, Horse Carts, Farm Wagons, Wheel Barrows, Coal and Canal Barrows. In fact we have everything for shipping or using on plantation, farm or garden. JOHN MAYHER & CO.

N. B. Guano, Bone Dust, Poudrette, Superphosphate of Lime, and other fertilisers Jan 1, 1853—m&wtf

Farm Implements for California.

BURRALL'S PRIZE REAPERS, MOWERS. *Threshers, Separators, Clod Crushers, Field Rollers, Cultivators, Horse Powers, &c., &c.*—all warranted of the best material and workmanship. Strong, compact, and reliable, expressly for that market.

Made and sold cheap for cash, by THOMAS D. BURRALL, Geneva, Ontario Co., New-York.

Feb. 10, 1853—7—13t.—m3t.

Agricultural Implements.

STRAW AND STALK CUTTERS—of all patterns.
CORN MILLS—both of Iron and Burr Stone.
CORN AND COB CRUSHERS—of Beals', Nichols' and Sinclair's make.
ROAD SCRAPERS—of several patterns.
FANNING MILLS—of all the best makers.
SAUSAGE STUFFERS AND CUTTERS—of all patterns.
VEGETABLE OR ROOT CUTTERS—of approvedkinds.
CORN SHELLERS—for hand and horse power.
VEGETABLE BOILERS—of Mott's and Bent's patterns.
GARDEN AND WHEEL BARROWS—of iron and wood.
HAY AND COTTON PRESSES—Bullock's patent
BRICK MACHINES—of Hall's and other makers.
WAGONS AND CARTS.
PLOWS—of Prouty & Mears, Centre Draft, and Rich's Iron Beam PLOWS—Eagle, Massachusetts make, and Minor & Hortons.

For sale at the State Agricultural Warehouse, No. 25 Cliff Street, New-York. Nov. 1—tf.

Improved Sub-soil Plow.

THIS Plow requires less team than any other, and therefore disintegrates the soil more deeply, and at less cost. For sale at the manufacturer's agents, No. 25 Cliff St., near Fulton, by LONGETT & GRIFFING, New-York.

March 1—2t.

Valuable Farm for Sale.

THE subscriber offers for sale four hundred and fifty acres of land, being a part of his homestead, and comprising two hundred acres of as desirable land as any in Addison county—lying on the main road four miles north of Vergennes on the border of Lake Champlain, and one mile from the Railroad Station. It is under good cultivation, and furnished with commodious buildings. The remaining 250 acres is wood land; a portion of it covered with a heavy growth of hemlock and other valuable timber, and the remainder with the best quality of wood for fuel. The property will be sold together or in parcels. Postpaid inquiries promptly responded to.

ROW'D T. ROBINSON,
Aug. 1—tf. Ferrisburgh, Addison co., Vt.

Wanted.

A PERSON who understands "thorough draining," as practiced in England—especially as applied to swamps. None need apply, except such as have a practical knowledge of the subject, and are competent to undertake a work of the kind. Address or apply in person to F. SHELDON, No. 40 Wall-street, New-York.—Feb. 1.

Agricultural Implements.—Field Seeds.

THE subscriber, occupying three large stores, which are filled with Agricultural Implements, asks the attention of the public to the most numerous assortment ever yet offered in New-York. Among these are Plows of more than a hundred different kinds, Harrows, Rollers with iron sections, Seed Sowers and Corn Planters, Cultivators, Reaping and Mowing Machines, Horse Powers, &c.

Field Seeds—Lucern, Ray Grass, Timothy, Clover, Belgian Carrot, Sugar Beet, Mangel Wurzel, Ruta Baga, Early Potatoes, &c.

Garden and Flower Seeds of the choicest sorts.

Peruvian Guano and other Fertilizers. R. L. ALLEN,
New-York Agricultural Warehouse and Seed
March 1—tf. Store, 189 and 191 Water St., N. Y.

Grass Seeds.

TIMOTHY, Red and White Clover, Lucern, Ray Grass, Kentucky Blue Grass, Orchard Grass, Red Top, and Lawn mixed grass, all of the best quality. For sale by

LONGETT & GRIFFING, No. 25 Cliff St.,
March 1—2t. near Fulton, New-York.

Garden Seeds for 1853.

New-England Agricultural Warehouse & Seed Store,

No. 51 and 52 North Market-st., Boston.

THE subscribers would announce to the public, that their supply of Garden Seeds for 1853 is now complete, including many new and valuable varieties. Orders should be sent as early as possible—and persons ordering may rest assured that no pains will be spared to insure their satisfaction. Seeds put up so as to be sent to any part of the United States with perfect safety.

Early Emperor Peas,	Champion of England,
Hill's Early "	Queen of the Dwarf,
Kent's Early "	Victoria Marrow,
Prince Albert, very fine, early,	Monastery Marrow,
Cedo Nulli	Blue Imperial, improved,

and many other fine varieties.

Shilling's Early Queen Cabbage, Mason's Early Drumhead, Green Globe Savoy, Early York, Early Dutch, Drumhead, Early and Late Sugarloaf, Early Hope, Turnep Rooted, Purple Green Top, and other fine kinds.

Early Walcheren Cauliflower, and many other varieties. Early Flat Bassano Beet, extra fine and early, and all other varieties. Also every variety of Vegetable worthy of cultivation.

The finest FLOWER SEEDS of every known variety and species, cultivated by ourselves, and imported from abroad.

Catalogues will be sent on application by letter, with one postage stamp enclosed. JOSEPH BRECK & SON,
Seedsmen and Florists, 51 & 52 North
Feb. 24—8—1tm1t. Market Street. Boston

Corn! Corn!!

SIXTY distinct varieties, including all the kinds exhibited at the last Fair of the American Institute, with names, time of ripening, mode of culture, &c., &c Eight kernels of each, making 480 kernels, will be sent to any part, on recipt of $1. Apply to WM. WEEDON, at Smith's Seed Store, 388 Broadway, New-York. Feb. 24.—8—2t*

Basket Willow.

CUTTINGS of the best kinds of basket willow, (with directions for cultivation, for sale at $5 a thousand, by WM. H. DENNING, Fishkill Landing, Dutchess County.

March 1—m2t.*

Albany Drain Tile Works.

No 60 Lancaster Street—West of Medical College, Albany.

THE subscriber has now on hand, Draining Tile of the following descriptions. Prices reduced.

HORSE SHOE TILE.

5½ inch Rise, or	4½	inch Calibre,	.....	$18 00	pr. 1000.
4½ " "	3½	"	.....	15 00	"
3½ " "	2½	"	.....	12 00	"

SOLE TILE.

4½ inch Rise, or	3½	inch Calibre,	.....	$18 00	pr. 1000.
3½ " "	2½	"	.....	12 00	"

These Tile are over one foot in length, and are so formed as to admit water at every joint, draining land from 12 to 20 feet each side of the drain—being the cheapest and most durable article used.

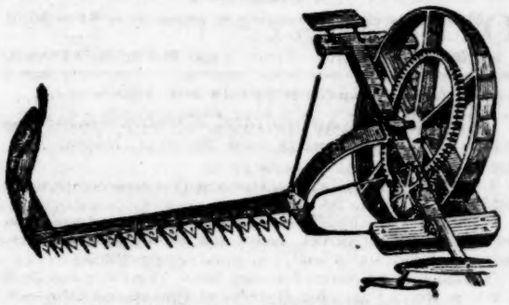
Tile sufficiently large for drains around dwellings, at $4 and $8 per 100 pieces. Orders from a distance will receive prompt attention.

Albany, April 1, 1852—tf. JOHN GOTT.

The Lodi Manufacturing Company

OFFER their Poudrette this season at their usual rates, viz: One barrel, $2.00—2 barrels, $3.50—3 barrels, $5.00—5 barrels, $8.00—6 barrels, $9.50, and any amount over 6 barrels $1 50 per barrel. Delivered free of cartage or other expense, on board of vessel or railroad, in the city of New York. ☞ A small trial requested.

This article is so well known, and so universally approved of as a manure for corn and garden vegetables, that an extended advertisement is scarcely necessary. The Company will send free of cost, to any one wishing further information, a pamphlet containing instructions for use, &c.—also certificates from Hon. Daniel Webster, A. J. Downing, and others, together with other interesting matter. Orders sent by mail, enclosing money, will be promptly acknowledged. All communications must be post-paid, and addressed to the "Lodi Manufacturing Company, New-York," office 74 Cortland Street. Jan. 1—m5.w5t



Ketchum's Patent Mowing Machine.

Howard & Co., Proprietors and Manufacturers,

Buffalo, N. Y.

THIS justly celebrated machine has been steadily advancing in public favor, for its simplicity, durability and efficiency—and it has settled the question beyond a doubt that grass can be cut by Horse Power: for, during last season, Five Hundred of these Machines were sold by us, and universally approved by those who used them. Farmers were daily in the habit of cutting from ten to fifteen acres per day, with ordinary driving. It leaves the grass uniformly spread over the ground, requiring no turning to cure properly. In the Report of the Committee who served at the Trial of Mowing and Reaping Machines, held at Geneva in July last, they show fully and conclusively *this to have been the only Machine in the field which cut its allotted two acres, without clogging or any interruption*, doing its work admirably, and in far better manner than can be done by manual labor with a scythe. *Our* knives are not *sickle edged*, consequently do not clog at every little hummock or bog they may happen to come in contact with. The Committee also show that there is an actual saving, by the use of this Machine over hand labor, of thirteen dollars per day. We have only to ask those who want a *perfect* Mowing Machine to examine the Report and judge for themselves. This Machine took the first premium as a mower, at the trial in Springfield, Ohio; a gold medal at the Fair of the American Institute, N. Y., also, first premium at the Provincial Fair, at Toronto, C. W.

They are so very compact that one of them can be easily carried in an ordinary one-horse wagon, and so very simple that it requires no machinist to put it together, as there are but two bolts (beside the pole bolts) to be secured to have the machine ready for use, and which does not require over ten minutes time. They weigh about 750 lbs., and can be worked by any boy who can manage a team. We have made all the improvements suggested by experience in the way of strength, durability, &c., and sell them under the following warranty: That said machines are capable of cutting and spreading with one span of horses and driver, from ten to fifteen acres per day, of *any kind of grass*, heavy or light, wet or dry, and do it as well as is done with a scythe by the best of mowers. They are equally capable of cutting Barley, Buckwheat, Millet, &c. It is much less trouble to keep the knives in order than a scythe, as they have frequently been known to cut from ten to fifteen acres without sharpening, which can be done on an ordinary grind stone in a few minutes. We can give any reference required for the full performance of our machine, as above stated.

Orders should be sent in early, as we shall manufacture but a limited number. The price of our Machine, including two sets of Knives, Extra Knife Blades, Wrench, &c., is $110, cash, in Buffalo, the machine to be delivered on board of boat or cars free of charge.

Office and Shop, corner of Chicago street and Hamburgh canal, near Eastern R. R. Depot, Buffalo.

Feb. 24—9—2tmf. HOWARD & CO.

Manures.

PERUVIAN GUANO, 2¼ to 2½ cents per pound.
BONE DUST, when taken in equal quantities, $2 25 per barrel.
BONE SAWINGS, separately, $2.50 per barrel.
PLASTER, $1 to $1 25 per barrel.
POTASH, 3½ to 4 cents per pound.
CHARCOAL, $1 per barrel.
SULPHURIC ACID, 2½ to 2½ cents per pound.
SUPERPHOSPHATE OF LIME, 2½ cents per pound.
WOOD'S RENOVATING SALTS, one cent per pound.
For sale at the State Agricultural Warehouse, No. 25 Cliff-street, New-York. LONGETT & GRIFFING.
Feb. 1—etf.

Super-Phosphate of Lime.

THIS extraordinary fertilizer, the effects of which as a manure and general assistant to soils, has proved itself invaluable to the agriculturist. This most important constituent of the soil is being daily removed and taken up by plants in solution, and unless such substance be returned, fertility must decrease, and land become poor. Its promoting and pushing power of growth, in giving strength to plants while in their young and tender state, fortifying them for early maturity, and enriching qualities, excells over all other manures. It is some ten *years* since its first introduction in England, where also a patent right was granted the first *maker* after the experiment *was* proved of its magic effects on land. The progressive high repute of its properties has caused the demand each year to increase, and at the present time some thousands of *tons* are annually sold to the farmers. The subscriber has had much experience in the manufacture of this manure in Europe, which leads him to suppose he stands unequalled by any other more able competitor. Some considerable quantities were disposed of last season, the beneficial result of which *has caused* all that watched its *power* to send orders for delivery in the coming spring. Being in a perfect powder, it is at once easy in handling, may be *sown* with seed, broadcast, or drilled in. To prevent deception, henceforward all bags or other packages will be branded with the maker's name. It is on sale at the following agricultural warehouses in New-York.

Longett & Griffing, 25 Cliff Street, N. Y., and R. L. Allen, late A. B. Allen's, 189 Water Street, N. Y, where purchasers may be sure of obtaining a chemically pure and genuine article. Enquire for De Burgh's No. 1 Super-Phosphate of Lime. March 1.—m3t.

$500 IN PREMIUMS.

Special Announcement.

IN order to bring the magazine business back to the old channel of *the mails*, under the reduced postage, the publisher of

GRAHAM'S MAGAZINE

offers premiums amounting to FIVE HUNDRED DOLLARS to the Postmasters or residents of any post-towns in the United States, who will send the largest number of subscriptions, *through the mails* prior to the *first of July*, 1853.

First Premium, $200 for the Largest Club.
Second Premium, $150 for the Second Best.
Third Premium, $75 for the Third Best.
Fourth Premium, $50 for the Fourth Best.
Fifth Premium, $25 for the Fifth Best.

And to the TEN next largest a splendidly bound copy of GRAHAM, for one year, with five-dollar binding.

The list of the competitors will be published complete at that time, so that the utmost fairness may be manifest. A statement will also be published on the 10th of June, of those towns which have entered into competition, with the number of subscribers sent from each, up to that time.

The Books of the office will also be subject to the inspection of competitors, and every evidence of *good faith* furnished.

THE TERMS ARE—

Single subscribers,.....	$3
Six subscribers, one year,...	10
Ten " "	16
Thirteen " "	20

Single subscribers may be added, at any time, at the rate of the first club sent.

Competitors need not confine themselves to one post-town, but the names must be forwarded by the competitor *himself*, whether from one or more towns, so as to prevent confusion.

Address, GEO. R. GRAHAM,
134 Chestnut street, Philadelphia.

P. S—We presume that no Postmaster, with whom we have done business, nor any Editor with whom we exchange, will for a moment doubt, that the statements set forth, as above, *will be lived up to, to the letter, in all respects.* G.

Feb 1—m3t.

Albany County Ag. Society.

APPLICATION having been made to the subscriber, *Clerk* of the County of Albany, to call a meeting for the organization of a County Agricultural Society,

Notice is hereby given, that a meeting will be held for that purpose, at the State Agricultural Rooms in the city of Albany, on Thursday, the 14th of April next, at 11 o'clock, A. M.

ROBERT HARPER, Clerk.

County Clerk's Office, March 17, 1853—11—4t—m1t.

A. L. Bingham's 3d Annual Sheep-Shearing Festival.

THE undersigned gives notice, that he will hold his Third Annual Sheep Shearing Festival, at the well known resort of James K. Hyde, in Sudbury, Rutland county, Vt., on the 1st and 2d days of June next, commencing at 10 o'clock.

He proposes to shear publicly, from fifty to one hundred French Merinos Ewes, with a view to enable all interested in this branch of production, to see and judge for themselves of the weight and value of these sheep compared with others. All Wool Growers and Manufacturers interested, are respectfully invited to attend.

Several very superior Bucks and Ewes of the best French importations and stock, will be on exhibition, and for sale.—A number of gentlemen, largely interested in the celbrated Black Hawk and other Morgan horses, have signified their intention to avail themselves of the occasion to exhibit a splendid collection of the best horses in Vermont.

A. L. BINGHAM.

West Cornwall, Vt., March 14, 1853.—2t

Sale of Short Horned Cattle.

I WILL sell by Auction, at my residence, on Wednesday, 8th June next, at 1 o'clock P. M., about Thirty thorough bred Short horned Cattle. About twenty of them are Cows and Heifers, the remainder young Bulls. Nearly every animal is the produce of the Imported Bull "Yorkshireman" and 3d "Duke of Cambridge," bred by the late Thomas Bates' Esq., of Kirkleavington, England, and "Earl of Seaham" and "Vane Tempest," bred by John Stephenson, Esq., of Durham, England, and are of his famous Princes family.

The upset prices of these animals will be from $150 to $300, as to age, &c., &c.

I will also offer the above named Imported Bull, "Vane Tempest,"—his upset price is $1000.

TERMS—Cash, or satisfactory notes at three months, payable at the Bank of Auburn, with interest.

I will also have for sale at that time a few South Down Rams and Suffolk Pigs.

Catalogues will be ready about 15th March next, and will be found with

A. B. Allen, Esq., 89 Water street, New York.
Sanford Howard, Esq., Cultivator office, Boston.
Luther Tucker, Esq., and B. P. Johnson, Esq., Albany.
L. F. Allen, Esq., Buck Rock.
M. B. Bateman, Esq., Columbus, Ohio.
W. T. Dennis, Esq., Richmond, Indiana, and with the subscriber.

J. M. SHERWOOD.

Auburn, N. Y., Feb. 24—9—e.o m—m.

To Flax Growers.

THE subscriber has invented and builds to order, a FLAX MACHINE, which, attended by two hands, is guaranteed to dress from three hundred to four hundred and fifty pounds of flax per day. The saving in labor and tow, by comparison, is considered equivalent to the cost of dressing flax by the best common machinery, used in this country and Europe. The new machine is made with care, to secure strength and durability, and can be run at a speed which requires more than two hands to attend it. Unrotted flax straw can be dressed by it. It can be driven by horse power or otherwise; and, being portable, can be sent any distance. For the present, the price of the machine complete, is $400. Those who wish to obtain it in season to begin operations next autumn, will do well to apply soon.

S. A. CLEMENS.

Springfield, Mass., March 9, 1853.—mtf

White Shanghai Fowls.—$10 per pair.

EGGS for hatching, from fowls of the above named breed, will be carefully packed, and delivered to any Express in Boston, by addressing, (post-paid,) JOSEPH S. HILDRETH, 51 Court St., Boston, Mass.—$2 per dozen.

N. B—The subscriber's fowls were bred from the stock of Dr Eben Wright, that have taken the lead at every exhibition where they were present. March 17—m2t.

Suffolk Pigs,

OF pure blood, for sale by B. V. FRENCH,
Feb. 1—m1y. Braintree, Mass.

Seeds! Seeds!

CLOVER and Timothy Seed, early and late Peas, Beans, Potatoes, Corn and all others kinds of Field Seeds, and all Garden Seeds.

Also, Green-House and Hot-Bed plants, Fruit and Ornamental trees, in their season.

All articles sold will be warranted as represented.

April 1—m1t. DANA BROTHERS, Utica, N. Y.

Fowls and Eggs For Sale.

THE subscriber has yet a few choice pairs of the following varieties to dispose of. Cochin Chinas, Grey Shanghai, Buff do. of Perley stock, Buff do. of Marsh stock, Black do., White do. Golden Poland, Silver do. Bolton Greys and Java Bantams. Also, Eggs of all the above varieties. Also, Bremen Geese. E. E. PLATT.

Albany, April 1, 1853.—2t.

Cultivators,

OF several styles, and ranging in prices from $4 to $6,50. Also, Teeth sold separately.

CORN PLANTERS—Emery's and Batchelder's Patents, warranted to plant Corn better and more accurately than it can be planted by hand—will plant one acre per hour.

SEED SOWERS—for sowing all small seeds.

MORGAN'S NEW DOUBLE LEVER PREMIUM CHEESE PRESS—The cheapest, the simplest and most durable. Also, Kendall's Cheese Press.

CORN SHELLERS, Cast Iron and Wood—different styles and sizes, and from $6 to $12.50.

STRAW CUTTERS—Daniel's far-famed hand and power Cutter, straight knives, heavy and warranted to cut hay, straw and corn stalks well, and equal to any in use.

Thermometer Churns, Fanning Mills, Vegetable and Root Cutters, Mott's Vegetable Boilers and Agricultural Furnaces, Garden and Canal Wheelbarrows, Shovels, Spades, Forks, Grindstones, and all other articles used on the farm.

For sale at DANA BROTHERS, 91 Genesee street, Utica. April 1—m1t.

Dana Brothers, Utica, N. Y.

MANUFACTURERS and Wholesale and Retail Dealers in Agricultural and Horticultural Implements and Machines, are prepared to supply Farmers and Dealers with every variety of Agricultural Implements and Machines, Horticultural Tools, &c., at their Warehouse, No. 91 Genesee-street, Utica. April 1, 1853—m1t.

Mexican Wild Potatoes.

THE subscribers have the pleasure of informing their friends and the public, that they have received a small lot of the above remarkable Potatoes, which they offer for sale at $4 per bushel, or $1 per peck.

These potatoes were originally brought from Mexico, (where they were found growing wild,) about five years ago, and were planted in the western part of this State, where their size, productiveness, hardiness and total exemption from rot, attracted the attention of the intelligent farmers of that region, causing the demand for them last season to be so great, that they readily sold at $10 per bushel. They ripen early, and are frequently six or seven inches in length; skin very thin, white; eyes shallow; and flesh white, boiling very mealy. They are also very productive, one hundred bushels having been, under proper management, raised from two bushels of seed potatoes.

We also have on hand, Hall's Early June, Excelsior, Carters, Early Kidney, Bennett's Early, Early Sovereigns, American Flower Balls, and other choice varieties.

GEO. H. BARR & CO.,
April 1—1t 53 Cortland-st., New-York.

THE CULTIVATOR:

A MONTHLY JOURNAL OF

Agriculture, Horticulture, and Domestic Economy.

THE PRICE REDUCED TO 50 CENTS A YEAR.

This standard AGRICULTURAL MONTHLY commences with the new year, its THIRD SERIES. It is published in the same superior style, and will now be more valuable than ever, as the choicest Agricultural and Horticultural articles in THE COUNTRY GENTLEMAN will appear in its pages. The price hereafter will be as follows:

Single copies, Fifty Cents—Eight copies $3—any larger number at the same rate.

All subscriptions must commence with the January No., and the payments must in all cases accompany the order for the paper.

LUTHER TUCKER,
Publisher, Albany, N. Y.